

10.17.01 (9/6/2016)

Title 10 DEPARTMENT OF HEALTH AND MENTAL HYGIENE

**Subtitle 17 [SWIMMING POOLS AND SPAS] AQUATIC FACILITIES
AND VENUES**

**Chapter 01 [Public Swimming Pools and Spas] Public Aquatic
Facilities and Venues**

Authority: Health-General Article, §§2-102, 2-104, 18-102, and 20-303, Annotated Code of Maryland, and 15 U.S.C. §8003

.01 Purpose and Scope.

[A. The purpose of this chapter is to enact regulations that protect and promote the public health and safety of individuals at public spas and pools in Maryland. Public pools include limited public-use pools, recreational pools, and semipublic pools. Public spas include semipublic spas.

B. This chapter adopts construction standards, updates disinfection standards, recognizes certain new technologies and design concepts, and establishes minimum criteria for public pools and spas.¹

A. The purpose of this chapter is to enact regulations that protect and promote the public health and safety of individuals at aquatic facilities and venues in Maryland. Public aquatic facilities and venues include limited public-use pools, recreational pools, semipublic pools, public spas, semipublic spas and spray grounds.

B. This chapter adopts construction standards, updates disinfection standards, recognizes certain new technologies and design concepts, and establishes minimum standards for public aquatic facilities and venues.

.02 Exclusions.

[This chapter does not apply to a:

A. Private pool, except for a private pool defined as a limited public-use pool in Regulation .05B of this chapter;

B. Private spa;

C. Pool or spa that is completely emptied of water, disinfected, and refilled with water between each use and that is intended for use or used by a single individual during each use; or

D. Pool or a spa at a bed and breakfast, if the bed and breakfast facility has eight or fewer guest rooms.**1**

This chapter does not apply to:

A. A private aquatic venue, except for a private pool defined as a limited public-use pool in Regulation .04B of this chapter;

B. An aquatic venue that is:

(1) Completely emptied of water;

(2) Disinfected;

(3) Refilled with water between each use; and

(4) Intended for use or used by a single individual during each use.

.03 **IPreviously Constructed Pools and Spas.**

A. Except as provided in §C of this regulation, the owner of a pool or spa that was constructed before February 10, 1997 is exempt from bringing the pool or spa into compliance with:

(1) Regulations .13C, .14A(3), .17C, .18A(3), .22, .24, and .35 of this chapter; and

(2) Notwithstanding any exemption set forth at §A(1) of this regulation, the diving area dimensions of Regulation .27B of this chapter if the diving area is in compliance with American National Standard for Public Swimming Pools.

B. Except for Regulation .28 of this chapter, the owner of a pool or spa that was constructed before February 10, 1997:

(1) Shall maintain the pool or spa, including appurtenant structures and equipment as originally constructed; and

(2) May complete a repair according to Regulation .06P that restores the pool or spa to its original condition before damage or deterioration without the component complying with the requirements of this chapter.

C. For a pool or spa that was constructed before February 10, 1997, the exemptions in §A of this regulation do not apply if:

(1) The pool or spa has a condition that jeopardizes the health or safety of the public, in which case the owner shall ensure that the condition is corrected to meet the requirements of this chapter;

(2) An owner intends to alter the pool or spa, including appurtenant structures and equipment, in which case the owner shall ensure that the alteration complies with the requirements of this chapter; or

(3) A suction outlet is not in compliance with Regulation .28 of this chapter, in which case the owner shall ensure that the suction outlet is altered to meet the requirements of Regulation .28 of this chapter for suction entrapment prevention.¹

Documents Incorporated by Reference.

The following documents are incorporated by reference in this chapter:

A. Model Aquatic Health Code (MAHC), as amended except Chapters 4.7.4, 6.3.1.1, and 6.3.1.2;

B. American National Standard for Public Swimming Pools (ANSI/APSP/ICC-1 2014) except Articles 6.8, 6.9.1, 6.9.3, 7.1.6, 7.1.7, 7.1.7.1, 8.1.1, 12.3, 12.3.1, 12.3.2, 13.2.1.2, 13.2.3, 15.3, 17.4, 17.5.1, 18.1, 18.1.2, 18.1.2.1, 18.1.2.2, 18.1.2.3, 18.6, and 22.2.1;

C. American National Standard for Public Spas, (ANSI/NSPI-2 1999), except Articles 7.6 and 7.6.1;

D. Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities (NSF/ANSI 50-2013);

E. American National Standard for Residential Inground Swimming Pools (ANSI/APSP/ICC-5 2011);

F. American National Standard for Aboveground/Onground Residential Swimming Pools (ANSI/APSP/ICC-4 2012);

G. American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs (ANSI/APSP-16 2011);

H. 15 U.S.C. §8003, as amended; and

I. Eyewash Standard (ANSI Z358.1-2014).

.04 [Documents Incorporated by Reference.

The following documents are incorporated by reference in this chapter:

A. American National Standard for Public Swimming Pools (ANSI/NSPI-1 2003) except Articles 6.5, 6.5.1, 6.6, 6.6.1, 6.6.2, 6.6.3, 6.8, 6.9.1, 6.9.3, 7.1.6, 7.1.7, 7.1.7.1, 8.1.1, 8.4.2.1, 8.4.2.3, 12.3.1, 12.3.2, 13.2.1, 13.2.3, 15.3, 17.4.1, 17.5.1, 18.6, and 22.2.1, and except that in Appendix E, the term "shall" is substituted for "should" whenever it appears;

B. American National Standard for Public Spas, (ANSI/NSPI-2 1999), except Articles 7.6 and 7.6.1;

C. Circulation System Components and Related Materials for Pools, Spas/Hot Tubs (ANSI/NSF Standard-50 1992);

D. American National Standard for Residential Inground Swimming Pools (ANSI/NSPI-5 1995) including Appendix E, Model Barrier Code for Residential Swimming Pools, Spas, and Hot Tubs;

E. American National Standard for Aboveground/Onground Residential Swimming Pools (ANSI/NSPI-4 1992); and

F. 15 U.S.C. §8003, as amended.**1**

Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) "AED" means automated external defibrillator.

(2) "AF" means alkalinity factor.

(3)"Approved" means found by the Secretary to be in satisfactory compliance with applicable statutes and regulations promulgated or enforced by the Secretary.

(4)"APSP" means the Association of Pool and Spa Professionals.

(5) "Aquatic venue category" means for an aquatic venue constructed:

(a) After October 1, 2017: Category A; and

(b) Before October 1, 2017: Category B.

(6) "Aquatic venue classification" means for a:

(a) Pool: recreational, semi-recreational, or limited public use;

(b) Spa: recreational or semi-recreational; and

(c) Spray ground: spray ground.

(7) "Aquatic venue type" means standard pool, spa, spray ground, therapy pool, wading pool, or water recreational attraction.

(8) "Aquatic venue qualified operator" means an individual that meets the requirements of Regulation .45 of this chapter.

(9) "Authority Having Jurisdiction (AHJ)" means the Maryland Department of Health and Mental Hygiene.

(10) "CF" means calcium hardness factor.

(11) "Component" means:

(a) A piece of aquatic venue equipment;

(b) A deck;

(c) A barrier;

(d) One or more skimmers;

(e) One or more filters, including piping and valves;

(f) A ventilation system;

(g) Lighting provided for water, deck, and walkways; or

(h) Pipe material for aquatic venue water.

(12) "Critical violation" means for a:

(a) Category A venue:

- (i) Failure to comply with 6.6.3 of the Model Aquatic Health Code;
- (ii) Failure to comply with maximum disinfectant levels in the Model Aquatic Health Code; and
- (iii) Failure to comply with bonding requirement in the Model Aquatic Health Code.
- (b) Category B venue, failure to comply with:
 - (i) Except for Regulation .23B(2)(b), Regulation .23, Barriers, of this chapter;
 - (ii) Except for Regulation .29A, Regulation .29, Circulation Systems, of this chapter;
 - (iii) Regulation .30, Circulation System Components, of this chapter;
 - (iv) Regulation .32, Entrapment Prevention, of this chapter;
 - (v) Regulation .36, Illumination of Water, Deck, Walkway, of this chapter
 - (vi) Regulation .44, Aquatic Facility and Venue Safety, of this chapter;
 - (vii) Regulation .47, Aquatic Venue Operation, of this chapter;
 - (viii) Regulation .48, Disinfection of an Aquatic Venue, of this chapter;
 - (ix) Except for Regulation .49A(1), Regulation .49, Water Chemistry of an Aquatic Venue, of this chapter;
 - (x) Regulation .52, Sanitary Quality of Water, of this chapter;
 - (xi) Regulation .58, Bonding, of this chapter.
- (c) Category A or Category B venue, a pH level:
 - (i) Below 6.5; or
 - (ii) Above 8.
- (13) "Department" means the Department of Health and Mental Hygiene.
- (14) "DPD" means diethyl-p-phenylene diamine.

(15) "EDTA" means ethylenediamine-tetraacetate.

(16) "Float tank" means an isolation tank, originally called a sensory deprivation tank, also known as a floatation tank or sensory attenuation tank, is a lightless, soundproof tank with high magnesium sulphate content filled with salt water at skin temperature, in which an individual floats.

(17) "Full compliance inspection" means an inspection that verifies compliance with this chapter.

(18) "Handhold" means a coping, horizontal bar, or cantilevered decking.

(19) "Latch" means a device attached to a gate for the purpose of securing the gate closed.

(20) Latch Release.

(a) "Latch release" means a mechanism to disengage the latch to allow the gate to open.

(b) "Latch release" includes but is not limited to an electronic lock, a key fob system, or a swipe card entry system.

(21) "Lifeguard" means an individual who is 15 years old or older and who meets the requirements of Chapter 6.2.1 of the MAHC.

(22) Limited Public-Use Pool.

(a) "Limited public-use pool" means a private pool, which is made available for use by:

(i) Children in family day care under the care of a family day care provider at a family day care home as defined in COMAR 13A.15.01; or

(ii) An organized group, agency, or other person for swimming lessons or water safety training.

(b) "Limited public-use pool" does not include a pool that is emptied of water, disinfected, and refilled with water between each use.

(23) "Major Violation" means, for a:

(a) Category A venue, failure to comply with:

(i) Regulation .06, Construction and Alteration Permits, of this chapter;

(ii) Regulation .07, Replacements, of this chapter;

(iii) Regulation .09, Approval After Construction or Alteration, of this chapter; or

(b) Category B venue, failure to comply with:

(i) Regulation .06, Construction and Alteration Permits, of this chapter;

(ii) Regulation .07, Replacements, of this chapter;

(iii) Regulation .09, Approval After Construction or Alteration, of this chapter;

(iv) Regulation .23B(2)(b), Self-Latching Gate, of this chapter;

(v) Regulation .29A, Gauges and Meters, of this chapter;

(vi) Regulation .33, Chemical Storage Area, of this chapter;

(vii) Regulation .49A(1), pH, of this chapter;

(viii) Regulation .50, Operating Records Required, of this chapter; and

(ix) Regulation .51, Test Kits, of this chapter.

(24) "Make-up water" means the potable water used to maintain the water level in a pool, spa, or within the surge tank of a spray ground.

(25) Non-substantial Alteration.

(a) "Non-substantial alteration" means to:

(i) Change or modify an equipment room, a bathhouse, a component, or the configuration of an aquatic venue where the total cost of the work does not exceed 50% of the replacement cost of the aquatic venue or indoor aquatic facility;

(ii) Move a component from one location or position to another; or

(iii) Install a new component.

(b) "Non-substantial alteration" does not include a repair, replacement, or substantial alteration.

(26) "Owner" means a person who has a legal interest in an aquatic facility or venue or in the property on which an aquatic facility or venue is or is to be constructed or altered.

(27) "Person" means an individual, receiver, trustee, guardian, personal representative, fiduciary, or representative of any kind and any partnership, firm, association, corporation, or other entity.

(28) "PHMB" means poly(iminoimidocarbonyliminoimidocarbonyliminoheexamethylene hydrochloride) or polyhexamethylene biguanidine hydrochloride.

(29) "Plumment" means the center of the end of the diving board over the water, in the position where it will be installed.

(30) "Private aquatic venue," means an aquatic venue that is:

(i) Not open to the public;

(ii) On a property on which not more than four private residences are located; and

(iii) Used exclusively by the residents of the property and nonpaying individuals invited to use the aquatic venue by a resident.

(b) "Private aquatic venue" includes an aquatic venue at a private residence used for short-term rentals including weekly, monthly, or seasonal rentals.

(31) "Protective Barrier" means an obstruction or partition at the transition area between a shallow and deep area of a therapy pool.

(32) "PSI" means pounds per square inch.

(33) "Public aquatic venue" means an aquatic venue that is not a private aquatic venue.

(34) "Recreational aquatic venue" means a pool or spa that:

(a) Is not a limited public-use pool, private aquatic venue, semi-recreational pool, semi-recreational spa or spray ground;

(b) Is provided as the owner's primary business or the facility's primary purpose, for example, a swim club or similar facility;

(c) Is open for general admission to the public;

(d) Is available to an individual paying a fee for use of the aquatic venue;

(e) Is equipped with a swimming pool sliding board, diving platform, water slide, water flume, or water recreational play equipment that is built into or attached to the aquatic venue structure;

(f) Is provided by, or used by:

(i) A youth camp;

(ii) A college, university, or school;

(iii) A municipality;

(iv) A water park, amusement park, or water recreational attraction; or

(v) An apartment complex, housing subdivision, or mobile home park with more than ten units, except as provided in §B(36)(a)(v) of this regulation; or

(g) Is used more than 4 times a week for swimming lessons, water safety instruction, or swimming competition.

(35) Repair.

(a) "Repair" means substituting a component having the same make and model as the previously approved component for the previously approved component.

(b) "Repair" includes a motor change where the difference in total horsepower between the existing motor and the new motor is less than 0.1.

(c) "Repair" does not include:

(i) Installation of additional equipment;

(ii) Non-substantial alterations;

(iii) Replacements;

(iv) Substantial alterations; or

(v) Substitutions involving a component which do not meet the requirements of this chapter.

(36) Replacement.

(a) "Replacement" means substituting a component, which has a different make or model but has the same operating characteristics and certifications as the previously approved component, for the previously approved component.

(b) "Replacement" does not include:

(i) Installation of additional equipment;

(ii) Non-substantial alterations;

(iii) Repairs;

(iv) Substantial alterations; or

(v) Substitutions involving a component which do not meet the requirements of this chapter.

(c) "Replacement" includes the installation of any component which is being installed at a Category [B](#) aquatic venue to bring an aquatic venue into compliance with new provisions of this chapter.

(37) "Routine inspection" means an inspection that includes but is not limited to verifying the aquatic venue does not have any critical or major violations.

(38) "Safety vacuum release system (SVRS)" means a vacuum release system that:

(a) Is capable of providing vacuum release at a suction outlet caused by a high vacuum occurrence due to a suction outlet flow blockage; and

(b) Complies with 15 U.S.C. §8003.

(39) "Secretary" means the Secretary of Health and Mental Hygiene or the Secretary's designee, including a local health officer.

(40) "Semi-recreational aquatic venue" mean a pool or spa at a facility that:

(a) Has use restricted to an individual:

(i) Staying at the facility, where the facility is a temporary dwelling, including a hotel, motel, campground, bed and breakfast, or similar temporary dwelling;

(ii) Holding membership at the facility, where the facility is an adult health club, retirement community, marina, condominium, or similar facility;

(iii) Residing at an apartment complex, housing subdivision, or mobile home park with ten units or less;

(iv) Receiving treatment at a physical therapy center pool, or spa, where the pool or spa is used for providing therapy; or

(v) Who is the owner or an owner of the pool or spa; and

(b) Has a pool or spa that is not:

(i) Open for admission to the general public, except as provided in §B(36)(a)(v) of this regulation;

(ii) Available to an individual upon the payment of a fee for the use of the pool and spa;

(iii) A limited public-use pool, a private aquatic venue, a recreational pool or a spray ground;

(iv) Equipped with a swimming pool sliding board, diving platform, water slide, water flume, or water recreational play equipment that is built into or attached to the pool structure.

(41) "Shallow" means less than 5 feet in depth.

(42) "Splash zone" means the maximum distance the water from a spray ground can project horizontally at designed flow rates.

(43) Spray Ground.

(a) "Spray ground" means an area for water play into which treated and filtered water is sprayed but not allowed to accumulate on the play surface.

(b) "Spray ground" includes splash pads and interactive fountains.

(c) "Spray ground" does not include decorative fountains where interaction with the water is prohibited.

(44) "Standard pool" means a pool that is not an unconventional aquatic venue or wading pool.

(45) "Supplemental disinfection" means, other than chlorine or bromine, any disinfectant, sanitizer, or antimicrobial pesticide approved by the Environmental Protection Agency.

(46) "Swimming pool slide" means a device less than 10 feet in height that an individual may use to enter a pool by sliding down an inclined plane.

(47) "Swim spa" means a spa designed to create a current of water against which an individual may swim for exercise or therapy.

(48) "TDSF" means total dissolved solids factor.

(49) "TF" means temperature factor.

(50) "Total dynamic head" means the hydraulic calculation of the resistance to flow in a circulation system based on the Hazen-Williams formula in Regulation .29C of this chapter.

(51) "Total horsepower" means horsepower times the service factor.

(52) "Tube ride" means a pool designed to move an individual on a tube, raft, or other floating support along a channel filled with water.

(53) "Unblockable drain" means a drain of any size and shape that:

(a) Its perforated area cannot be shadowed by the area of the 18 inch by 23 inch body blocking element of the American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs (ANSI/APSP-16 2011);

(b) The rated flow through the remaining open area cannot create a suction force in excess of the removal force values in Table 1 of American National Standard for Suction Fittings for Use in Swimming Pools, Wading Pools, Spas, and Hot Tubs (ANSI/APSP-16 2011);

(54) Unconventional Aquatic Venue.

(a) "Unconventional aquatic venue" means an aquatic venue that is not a standard pool, spa, or wading pool.

(b) "Unconventional aquatic venue" may include, but is not limited to, a float tank, spray ground, therapy pool, or water recreational attraction.

(55) "User load" means the maximum number of individuals, as determined by the Secretary, for sanitary purposes, allowed:

(a) In a pool or spa based on the water surface area and water depth; or

(b) To use a spray ground based on the splash zone area.

(56) Water Recreational Attraction.

(a) "Water recreational attraction" means a special water circulation and operational feature or unconventional design and operational feature which provides a patron with a recreational activity different from that associated with a conventional swimming pool.

(b) "Water recreational attraction" includes but is not limited to a:

(i) Piece of water play equipment;

(ii) Lazy river;

(iii) Tube ride;

(iv) Water slide; and

(v) Wave pool.

(c) "Water recreational attraction" does not include a float tank, therapy pool, spray ground, floating or temporarily attached volleyball net, or floating or temporarily attached basketball hoop.

(57) "Water slide" means a water-contact amusement ride when the height of the slide is 10 feet or more.

(58) "WRI" means water replacement interval.

.05 [Definitions.

A. In this chapter, the following terms have the meanings indicated.

B. Terms Defined.

(1) Alteration.

(a) "Alteration" means to:

(i) Change or modify an equipment room, a bathhouse, a component, or the configuration of a pool or spa;

(ii) Move a component from one location or position to another; or

(iii) Install a new component.

(b) "Alteration" does not include a repair or replacement.

(2) "Approved" means found by the Secretary to be in satisfactory compliance with applicable statutes and regulations promulgated or enforced by the Secretary.

(3) "Barrier" means a fence or wall or a combination of a fence and wall that completely surrounds and obstructs access to the pool or spa.

(4) "Cfm" means cubic feet per minute.

(4-1) "Component" means:

(a) A piece of pool or spa equipment;

(b) A deck;

(c) A barrier;

(d) One or more skimmers;

(e) One or more filters, including piping and valves;

(f) A ventilation system;

(g) Lighting provided for water, deck, and walkways; or

(h) Pipe material for pool or spa water.

(5) "Gpm" means gallons per minute.

(6) "Lifeguard" means an individual who is 15 years old or older and who has a valid lifeguard certificate from:

(a) The American Red Cross;

- (b) The Boy Scouts of America, not including a lifeguard merit badge;
- (c) The Young Men's Christian Association;
- (d) Ellis and Associates' National Pool and Waterpark Lifeguard Training; or
- (e) An organization with a lifesaving training program equivalent to that of the American Red Cross.

(7) Limited Public-Use Pool.

(a) "Limited public-use pool" means a private pool which is made available for use by:

(i) Children in family day care under the care of a family day care provider at a family day care home as defined in COMAR 07.04.01; or

(ii) An organized group, agency, or other person for swimming lessons or water safety training.

(b) "Limited public-use pool" does not include a pool that is emptied of water, disinfected, and refilled with water between each use.

(8) "Make-up water" means the potable water used to maintain the water level in a pool or a spa.

(9) "NSF" means the National Sanitation Foundation International.

(10) "NSPI" means the National Spa and Pool Institute.

(11) "Operator" means a person who supervises, controls, conducts, or manages the operation of a pool or spa.

(12) "Owner" means a person who has a legal interest in a pool or a spa or in the property on which a pool or a spa is or is to be constructed or altered, or the owner's agent.

(13) "Person" means an individual, receiver, trustee, guardian, personal representative, fiduciary, or representative of any kind and any partnership, firm, association, corporation, or other entity.

(14) "PHMB" means
polyiminoimidocarbonyliminoimidocarbonyliminohexamethylene
hydrochloride.

(15) "Pool" means an artificial enclosure of water that is used for the immersion of the human body for recreation, therapy, or exercise, including a structure that is installed in the ground, above ground, outside, or in a building or portable structure.

(16) "Ppm" means parts per million.

(17) Private Pool and Private Spa.

(a) "Private pool" and "private spa" mean a pool or spa that is:

(i) Not open to the public;

(ii) On a property on which not more than four private residences are located; and

(iii) Used exclusively by the residents of the property and nonpaying individuals invited to use the pool or spa by a resident.

(b) "Private pool" and "private spa" include a pool or spa at a private residence used for short-term rentals including weekly, monthly, or seasonal rentals.

(18) Public Pool and Public Spa.

(a) "Public pool" and "public spa" mean a pool or spa that is not a private pool or spa.

(b) "Public pool" includes a:

(i) Limited public-use pool, as defined in §B(7) of this regulation;

(ii) Recreational pool as defined in §B(19) of this regulation; and

(iii) Semipublic pool, as defined in §B(23) of this regulation.

(c) "Public spa" includes a semipublic spa, as defined in §B(23) of this regulation.

(19) "Recreational pool" means a pool that:

(a) Is not a limited public-use pool, private pool, or semipublic pool, as defined in §B(7), (17), and (23) of this regulation;

- (b) Is provided as the owner's primary business or the facility's primary purpose, for example, a swim club or similar facility;
- (c) Is open for general admission to the public;
- (d) Is available to an individual paying a fee for use of the pool;
- (e) Is equipped with a sliding board, diving platform, water slide, water flume, or water recreational play equipment that is built into or attached to the pool structure;
- (f) Is provided by, or used by a:
 - (i) Youth camp;
 - (ii) College, university, or school;
 - (iii) Municipality;
 - (iv) Water park, amusement park, or water recreational attraction as defined in §B(34) of this regulation; or
 - (v) An apartment complex, housing subdivision, or mobile home park with more than ten units, except as provided in §B(23)(a)(v) of this regulation; or
- (g) Is used more than 4 times a week for swimming lessons, water safety instruction, or swimming competition.

(20) Repair.

(a) "Repair" means substituting a component having the same make and model as the previously approved component for the previously approved component.

(b) "Repair" does not include:

- (i) Replacements;
- (ii) Alterations;
- (iii) Installation of additional equipment; or
- (iv) Substitutions involving a component which do not meet the requirements of this chapter.

(20-1) Replacement.

(a) "Replacement" means substituting a component, which has a different make or model but has the same operating characteristics and certifications as the previously approved component, for the previously approved component.

(b) "Replacement" does not include:

(i) Repairs;

(ii) Substitutions involving a pump;

(iii) Substitutions involving a suction outlet sump or cover;

(iv) Alterations;

(v) Installation of additional equipment; or

(vi) Substitutions involving a component which do not meet the requirements of this chapter.

(21) "Safety vacuum release system" means a vacuum release system that:

(a) Is capable of providing vacuum release at a suction outlet caused by a high vacuum occurrence due to a suction outlet flow blockage; and

(b) Complies with 15 U.S.C. §8003.

(22) "Secretary" means the Secretary of Health and Mental Hygiene or the Secretary's designee, including a local health officer.

(23) "Semipublic pool" and "semipublic spa" mean a pool or spa at a facility that:

(a) Has pool use or spa use restricted to an individual:

(i) Staying at the facility, where the facility is a temporary dwelling, including a hotel, motel, campground, bed and breakfast having nine or more guest rooms, or similar temporary dwelling;

(ii) Holding membership at the facility, where the facility is an adult health club, retirement community, marina, condominium, or similar facility;

(iii) Residing at an apartment complex, housing subdivision, or mobile home park with ten units or less;

(iv) Receiving treatment at a physical therapy center pool, or spa, where the pool or spa is used for providing therapy; or

(v) Who is the owner or an owner of the pool or spa; and

(b) Has a pool or spa that is not:

(i) Open for admission to the general public, except as provided in §B(23)(a) of this regulation;

(ii) Available to an individual upon the payment of a fee for the use of the pool and spa;

(iii) A limited public-use pool, a private pool, a private spa, or a recreational pool, as defined in §B(7), (17), and (18) of this regulation;

(iv) Equipped with a sliding board, diving platform, water slide, water flume, or water recreational play equipment that is built into or attached to the pool structure; and

(v) At a bed and breakfast that has eight or fewer guest rooms.

(24) "Shallow" means 5 feet or less in depth.

(25) "Spa" means a pool, hot tub, or whirlpool that is:

(a) Primarily designed for relaxation or therapeutic use and not for swimming;

(b) Not more than 4 feet in depth;

(c) Equipped with built-in seats or benches; and

(d) Usually equipped with hydrotherapy jets, heated water, an air injection system, or some combination of these features.

(26) "Spray pool" means a shallow pool into which treated water is sprayed but not allowed to accumulate.

(27) "Swimming pool slide" means a device less than 10 feet in height that an individual may use to enter a pool by sliding down an inclined plane.

(28) "Swim spa" means a spa designed to create a current of water against which an individual may swim for exercise or therapy.

(29) "Therapy pool" means a pool that is exclusively used in the physical treatment of a disease, injury, or disorder.

(30) "Total dynamic head" means the hydraulic calculation of the resistance to flow in a circulation system based on the Hazen-Williams formula in Regulation .25C(1)(a) of this chapter.

(31) "Tube ride" means a pool designed to move an individual on a tube, raft, or other floating support along a channel filled with water.

(32) "Turnover rate" means the time required to circulate a quantity of water equal to the pool or spa volume.

(33) "Unblockable drain" means a drain of any size and shape that:

(a) A human body cannot sufficiently block to create a suction entrapment hazard;

(b) Has the minimum dimensions of 18 inches by 23 inches; and

(34) "User load" means the maximum number of individuals allowed in a pool or spa, as determined by the Secretary, for sanitary purposes, based on the water surface area and water depths.

(35) "Wading pool" means a pool with a water depth of 24 inches or less that is intended for use by children.

(36) Water Recreational Attraction.

(a) "Water recreational attraction" means a pool with special water circulation and operational features or unconventional design and operational features which provide patron recreational activity different from that associated with a conventional swimming pool, and which purposefully involves total or partial immersion in the water.

(b) "Water recreational attraction" includes but is not limited to a:

(i) Shallow water pool with permanently installed water play equipment;

(ii) Spray pool;

(iii) Tube ride;

(iv) Water slide; and

(v) Wave pool.

(c) "Water recreational attraction" does not include a pool with limited water features such as a deck-mounted sliding board or a raindrop feature.

(37) "Water slide" means a water-contact amusement ride when the height of the slide is 10 feet or more.

(38) "Wave pool" means a pool designed with mechanical or hydraulic apparatus to generate waves in the pool.¹

Previously Constructed Aquatic Facilities and Venues.

A. The owner of an aquatic facility or venue constructed before February 10, 1997:

(1) Except as provided in §§A(2)(b), (4) and F of this regulation, is exempt from bringing an aquatic facility and venue into compliance with Regulations .14B(3), .15B(3), 18B(3), .19B(1)(c), .24, .28, and .39 of this chapter;

(2) Shall:

(a) Except as required by §A(2)(b)—(c) of this regulation, maintain an aquatic facility and venue as originally constructed;

(b) Correct a condition that jeopardizes the health or safety of the public to meet the requirements of this chapter;

(c) Maintain the minimum turnover time for the aquatic venue in compliance with §C of this regulation; and

(d) At an aquatic venue that is equipped with only one skimmer, disable the skimmer equalizer line by plugging the equalizer line within the skimmer and either:

(i) Leaving an equalizer line cover, that meets the requirements of Regulation .32 of this chapter, on the equalizer line in the aquatic venue wall or floor; or

(ii) Removing the equalizer line cover and plugging the equalizer line in the aquatic venue wall or floor with a flush cap that cannot be removed without the use of tools;

(3) May complete a repair according to Regulation .08 that restores an aquatic facility and venue to its original condition before damage or deterioration without the component complying with the requirements of this chapter; and

(4) Who intends to alter an aquatic facility or venue shall ensure that the alteration complies with the requirements of this chapter.

B. The owner of an aquatic facility or venue that received approval after construction from the Secretary between February 10, 1997 and October 1, 2017:

(1) Shall:

(a) Maintain the minimum turnover rate for the aquatic venue in compliance with §C of this regulation; and

(b) At an aquatic venue that is equipped with only one skimmer, disable the skimmer equalizer line by plugging the equalizer line within the skimmer and either:

(i) Leaving an equalizer line cover, that meets the requirements of Regulation .32 of this chapter, on the equalizer line in the aquatic venue wall or floor; or

(ii) Removing the equalizer line cover and plugging the equalizer line in the aquatic venue wall or floor with a flush cap that cannot be removed without the use of tools; and

(2) Who intends to alter an aquatic facility or venue shall ensure that the alteration complies with the requirements of this chapter.

C. The owner of an aquatic facility or venue that was constructed before February 10, 1997 or that received construction approval from the Secretary between February 10, 1997 and October 1, 2018 shall maintain the following minimum turnover times based on the aquatic venue type:

<u>Type of Aquatic Venue</u>	<u>Minimum Turnover Time (t)</u>
<u>Any Aquatic Venue Not Specifically Listed</u>	<u>480 minutes</u>
<u>Limited Public-Use Pool</u>	<u>720 minutes</u>
<u>Spa</u>	<u>30 minutes</u>
<u>Spray Ground</u>	<u>120 minutes</u>
<u>Therapy Pool</u>	<u>360 minutes</u>

<u>Wading Pool</u>	<u>120 minutes</u>
<u>Water Recreational Attraction</u>	<u>360 minutes</u>

D. Except as provided in §A(2)(b), (4) and F of this regulation, the owner of a spa or wading pool that was constructed or that received construction approval from the Secretary before October 1, 2018, and is equipped with a single skimmer with a disabled equalizer line, is exempt from bringing the spa or wading pool into compliance with Regulation .30H of this chapter.

E. At the time of change in ownership, the aquatic venue shall become a Category A aquatic venue and the new owner shall ensure that the aquatic venue complies ~~fully~~ with the requirements of this chapter pertaining to a Category A aquatic venue.

F. A Category B aquatic venue shall become a Category A aquatic venue on January 1, 2030 and the owner shall ensure that the aquatic venue ~~fully~~ complies ~~fully~~ with the requirements of this chapter pertaining to a Category A aquatic venue.

.06 [Construction, Alteration, and Replacement Permits for Recreational Pools, Semipublic Pools, and Public Spas.

A. An owner who intends to construct or alter a recreational pool, semipublic pool, or public spa or replace a public pool or spa component shall obtain a construction, alteration, or replacement permit from the Secretary before beginning construction, alteration, or replacement work.

B. An owner may not construct or alter a recreational pool, semipublic pool, or public spa or replace a public pool or spa component without a construction, alteration, or replacement permit.

C. To obtain a construction, alteration, or replacement permit, an owner shall submit to the Secretary:

(1) An application for a construction, alteration, or replacement permit on an application form provided by the Secretary that includes:

(a) The full names and addresses of the owner and authorized agents of the owner who may act on the owner's behalf during the construction or alteration of the pool or spa, or the replacement of the public pool or spa component;

(b) A statement saying "I hereby acknowledge that all items either listed or shown in these plans and specifications as not in contract, by others, or

equivalent, are my responsibility. I also realize that this entire project must be completed in accordance with the approved plans and specifications and all conditions listed in the construction, alteration, or replacement permit and meet the requirements of this chapter prior to the issuance of an operating permit by the Secretary"; and

(c) The owner's signature, which:

(i) Indicates the owner has supplied the correct information on and with the application; and

(ii) Is in agreement with the statement set forth in §C(1)(b) of this regulation; and

(2) Plans and specifications for the construction, alteration, or replacement which:

(a) Are prepared by a licensed or certified professional engineer, architect, draftsman, or a person with extensive experience in the design of pools and spas;

(b) Are drawn to scale, in a professional and accurate manner, with sufficient clarity and detailed dimensions to show the nature and character of the work to be performed; and

(c) Include specific information on the quality or performance of the material or equipment when necessary to establish conformance with this chapter.

D. Except for an alteration or replacement, an owner shall ensure that the plans and specifications required in §C of this regulation include the following:

(1) Site plan with contours;

(2) Building plan;

(3) Pool or spa layout plan, sectional views, and appurtenant equipment;

(4) Pool or spa piping layout plan;

(5) Deck and barrier plan;

(6) Filter room layout plan with the location of equipment and piping;

(7) Ventilation plan;

- (8) Bathhouse plan;
- (9) Lighting plan;
- (10) Potable water supply plumbing diagram;
- (11) Waste disposal plumbing diagram;
- (12) Finish schedules;
- (13) Equipment and material specifications;
- (14) Head loss calculations;
- (15) Pump performance curve;
- (16) Waste water disposal site;
- (17) Chemical storage plan; and
- (18) Any information, including material samples, necessary to determine if the plans and specifications comply with criteria set forth in this chapter.

E. An owner shall ensure that, for an alteration or replacement, the plans and specifications required in §C of this regulation include the information that pertains to the alteration or replacement.

F. An owner shall obtain necessary local zoning approval and building, electrical, plumbing, and other applicable local permits before beginning construction or alteration of a recreational pool, semipublic pool, or public spa or replacement of a public pool or spa component.

G. Before issuing a construction, alteration, or replacement permit, the Secretary may require changes in the design of the facilities if the design does not meet the criteria set forth in this chapter.

H. Upon an owner's compliance with the provisions of this chapter, the Secretary shall approve the plans and specifications and issue a construction, alteration, or replacement permit, which is valid for the start of the construction, alteration, or replacement for 1 year from the date of issue and for 1 additional year from the date construction, alteration, or replacement begins.

I. The local county health officer may not approve a local building permit for recreational pool, semipublic pool, or public spa construction, alteration, or

replacement until the plans and specifications for pool or spa construction or alteration, or the replacement of a public pool or spa component have been approved by the Secretary.

J. The Secretary shall review the plans and application and shall approve or deny issuance of a construction, alteration, or replacement permit within 30 days of receipt of the application.

K. If plans are submitted that are not in compliance with the requirements of this chapter, the Secretary shall disapprove the plans and deny the issuance of a construction, alteration or replacement permit.

L. An owner may not deviate from the approved plans and specifications for construction, alteration, or replacement at a recreational pool, semipublic pool, or public spa unless revised plans are submitted to and approved in writing by the Secretary.

M. If a recreational pool, semipublic pool, or public spa is not being constructed or altered or components are not being replaced in accordance with the approved plans, the Secretary may revoke the construction, alteration, or replacement permit for the construction, alteration, or replacement and the owner immediately shall cease construction, alteration, or replacement.

N. If the Secretary denies the issuance of a construction, alteration, or replacement permit as set forth in §K of this regulation, or revokes a construction, alteration, or replacement permit as set forth in §M of this regulation, the Secretary shall notify the owner in writing:

(1) Of the reason or reasons for the denial or revocation;

(2) That the owner may request from the Secretary an opportunity for a hearing on the denial or revocation pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland, if the owner wishes to contest the denial or revocation; and

(3) That to preserve the right to a hearing, the owner shall contact the Department within 30 days of the receipt of the notice of denial or revocation.

O. An owner shall ensure that a construction, alteration, or replacement permit is posted in a conspicuous location at the site of construction, alteration, or replacement.

P. An owner may make a repair to a previously approved structure, component, or piece of equipment in accordance with this chapter without:

(1) Obtaining a construction, alteration or replacement permit from the Secretary; or

(2) Notifying the Secretary.¹

Construction, Non-Substantial Alteration, and Substantial Alteration Permits.

A. An owner who intends to construct, non-substantially alter, or substantially alter an aquatic facility or venue shall obtain a permit from the Secretary before beginning the work.

B. An owner may not construct, non-substantially alter, or substantially alter an aquatic facility or venue without a permit.

C. To obtain a permit, an owner of a Category A aquatic venue shall submit to the Secretary:

(1) An application for a permit on an application form provided by the Secretary;

(2) The application review fee required by COMAR 10.01.17.02; and

(3) The information required in Chapter 4.1 of the MAHC.

D. To obtain a permit, an owner of a Category B aquatic venue shall submit to the Secretary:

(1) An application for a permit on an application form provided by the Secretary that includes:

(a) The full names and addresses of the owner and authorized agents of the owner who may act on the owner's behalf during the construction, non-substantial alteration, or substantial alteration of an aquatic facility or venue;

(b) A statement saying "I hereby acknowledge that all items either listed or shown in these plans and specifications as not in contract, by others, or equivalent, are my responsibility. I also realize that this entire project must be completed in accordance with the approved plans and specifications and

all conditions listed in the permit and meet the requirements of this chapter before the issuance of an operating permit by the Secretary”; and

(c) The owner’s signature, which:

(i) Indicates the owner has supplied the correct information on and with the application; and

(ii) Is in agreement with the statement set forth in §D of this regulation;

(2) Plans and specifications for the construction, non-substantial alteration, or substantial alteration which:

(a) Are prepared by a licensed or certified professional engineer, architect, drafter, or a person with extensive experience in the design of aquatic facilities and venues;

(b) Are drawn to scale, in a professional and accurate manner, with sufficient clarity and detailed dimensions to show the nature and character of the work to be performed;

(c) Include specific information on the quality or performance of the material or equipment when necessary to establish conformance with this chapter; and

(d) Are supplied in triplicate; and

(3) The application review fee required by COMAR 10.01.17.02.

E. Except as provided in §F of this regulation, an owner shall ensure that the plans and specifications required by §D of this regulation include the following:

(1) Site plan with contours;

(2) Building plan;

(3) Aquatic venue layout plan, sectional views, and appurtenant equipment;

(4) Aquatic venue piping layout plan;

(5) Deck and barrier plan;

(6) Filter room layout plan with the location of equipment and piping;

- (7) Ventilation plan;
 - (8) Bathhouse plan;
 - (9) Lighting plan;
 - (10) Potable water supply plumbing diagram;
 - (11) Waste disposal plumbing diagram;
 - (12) Finish schedules;
 - (13) Equipment and material specifications;
 - (14) Head loss calculations;
 - (15) Pump performance curve;
 - (16) Waste water disposal site;
 - (17) Chemical storage plan; and
 - (18) Any information, including material samples, necessary to determine if the plans and specifications comply with criteria set forth in this chapter.
- F. An owner shall ensure that, for a non-substantial or substantial alteration, the plans and specifications required by §D of this regulation include the information that pertains to the non-substantial or substantial alteration.
- G. An owner shall obtain necessary local zoning approval and building, electrical, plumbing, and other applicable local permits before beginning work.
- H. The local health department may not approve a local building permit for or that includes construction, non-substantial alteration, or substantial alteration of an aquatic facility or venue until the plans and specifications for construction, non-substantial alteration, or substantial alteration of an aquatic facility or venue have been approved by the Secretary.
- I. The Secretary shall review the plans and application for a permit within 30 business days of receipt of the application.
- J. If plans are submitted that are:

(1) Not in compliance with the requirements of this chapter, the Secretary shall:

(a) Notify the owner of the deficiencies in the application;

(b) Deny the application if additional information to correct the deficiencies in the application is not received during the resubmittal window; or

(c) Allow the owner a resubmittal window of 30 calendar days to submit information to correct the deficiencies before denying the application according to §J of this regulation; and

(2) In compliance with the requirements of this chapter, the Secretary shall approve the plans and issue a permit, which is valid for the start of the work for 2 years from the issue date.

K. If the Secretary denies the issuance of a permit, an owner shall reapply for a new permit according to §D of this regulation and pay the applicable fees.

L. If an owner deviates from the approved plans and specifications for construction, non-substantial alteration, or substantial alteration of an aquatic facility or venue, the owner shall submit:

(1) Plans and specifications of the aquatic venue as constructed through the application review process of this regulation; and

(2) The applicable fees.

M. If the work on an aquatic facility or venue is not being done in accordance with the approved plans, the Secretary may revoke the permit and the owner shall immediately cease work.

N. If the Secretary denies the issuance of a permit as set forth in §J of this regulation, or revokes a permit as set forth in §M of this regulation, the Secretary shall notify the owner in writing:

(1) Of the reason or reasons for the denial or revocation;

(2) That the owner may request from the Secretary an opportunity for a hearing on the denial or revocation pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland, if the owner wishes to contest the denial or revocation; and

(3) That to preserve the right to a hearing, the owner shall contact the Department within 10 calendar days of the receipt of the notice of denial or revocation.

O. An owner shall ensure that a permit is posted in a conspicuous location at the work.

.07 [Permit for Construction of Part of a Recreational Pool, Semipublic Pool, or Public Spa.

A. An owner may request a permit for construction of part of a recreational pool, semipublic pool, or public spa by submitting to the Secretary:

(1) A detailed written explanation of why construction plans for the entire pool or spa cannot be submitted;

(2) Plans, information, and statements as required in Regulation .06 of this chapter that pertain to the construction of part of a recreational pool, semipublic pool, or public spa;

(3) A site plan;

(4) Information regarding the proposed water supply and waste disposal system; and

(5) A signed statement indicating that the permit holder for construction of part of a recreational pool, semipublic pool, or public spa will be proceeding at the owner's risk without the assurance that a permit for the construction of the rest of the pool or spa will be granted.

B. Upon an owner's compliance with the provisions of this chapter and local codes, the Secretary shall approve the plans and issue a permit for construction of part of a recreational pool, semipublic pool, or public spa.

C. If a person submits plans for the construction of part of a recreational pool, semipublic pool, or public spa that are not in compliance with the provisions of this chapter, or if a local code prohibits the issuance of a permit for partial construction, the Secretary shall disapprove the plans and deny a permit for the construction in accordance with Regulation .06 of this chapter.

D. A person may not operate a recreational pool, semipublic pool, or public spa until the entire project has been constructed and approved in accordance with Regulations .06-----.09 of this chapter.**1**

Replacements.

A. An owner may replace a component at an aquatic facility or venue before obtaining approval from the Secretary.

B. An owner shall obtain necessary local zoning approval and building, electrical, plumbing, and other applicable local permits before replacing a component at an aquatic facility or venue.

C. The local health department may approve a local building permit for or that includes replacement of a component at an aquatic facility or venue before the replacement application is approved by the Secretary.

D. An owner shall submit:

(a) On a form provided by the Secretary, an application for the replacement of a component at an aquatic facility or venue within 10 calendar days of completing the replacement; and

(b) The application review fee required by COMAR 10.01.17.02.

E. The Secretary shall inspect the replacement of a component at an aquatic facility or venue within 30 business days of receipt of the application and applicable fee.

F. If, during the inspection, the replacement of a component at an aquatic facility or venue is:

(1) In compliance with the requirements of this chapter, the Secretary shall;

(a) Provide the owner a copy of the inspection report; and

(b) Issue an approval letter; or

(2) Not in compliance with the requirements of this chapter, the Secretary shall:

(a) Deny the replacement application; and

(b) Notify the owner:

(i) Of the reason or reasons for the denial;

(ii) That the owner may request from the Secretary an opportunity for a hearing on the denial pursuant to State Government Article, Title 10,

Subtitle 2, Annotated Code of Maryland, if the owner wishes to contest the denial;

(iii) That to preserve the right to a hearing, the owner shall contact the Department within 10 calendar days of the receipt of the notice of denial; and

(iv) That the owner shall cease operation of an aquatic facility or venue if the component is essential to operation or cease operation of the replaced component where the replacement of a component was found to violate this chapter until the violation is corrected, a new replacement application and applicable fee is submitted to the Secretary, and the Secretary inspects and approves the replacement of the component.

.08 [Approval After Construction, Alteration, or Replacement.

A. After construction, alteration, or replacement of a component at a recreational pool, semipublic pool, or public spa is completed, the owner shall contact the Secretary for approval of the pool or spa within 30 days.

B. A person may not operate or permit the use of a recreational pool, semipublic pool, or public spa that has not received written approval from the Secretary after its alteration or construction.

C. A person may operate or permit the use of a recreational pool, semipublic pool, or public spa for 30 days after completing the replacement of a public pool or spa component without receiving a final inspection and written approval from the Secretary.

D. The Secretary shall conduct an inspection or inspections to ensure that a recreational pool, semipublic pool, or public spa is constructed or altered, or that a public pool or spa component is replaced according to the approved plans and meets the requirements of this chapter, and shall:

(1) Grant written approval for the pool or spa if it was constructed or altered, or a public pool or spa component was replaced according to the approved plans, meets the requirements of this chapter, and the owner has received local approval for any building, electrical, plumbing, or other work that requires a local permit; or

(2) Deny approval for the pool or spa if it was not constructed or altered, or a public pool or spa component was not replaced according to the approved plans, does not meet the requirements of this chapter, or the owner has not

received local approval for any building, electrical, plumbing, or other work that requires a local permit.

E. The Secretary shall grant written approval or deny approval of the completed construction, alteration, or replacement of a public pool or spa component within 30 days of receipt of notice of completion from the owner.

F. If minor items that do not affect the health or safety of the public need to be corrected, the Secretary may issue a partial approval for the pool or spa after construction, alteration, or replacement of a public pool or spa component pending full compliance according to the following conditions:

(1) The owner shall fully comply with this chapter by the end of the 30-day period in order to obtain written approval of the recreational pool, semipublic pool, or public spa; and

(2) If at the end of the 30-day period, the Secretary is unable to approve the recreational pool, semipublic pool, or public spa pursuant to §C of this regulation, the Secretary shall disapprove the construction or alteration.

G. If the Secretary does not grant approval for the pool or spa after it is constructed or altered, or a public pool or spa component is replaced, the Secretary shall notify the owner in writing:

(1) Of the reason or reasons for the disapproval;

(2) That the person may request from the Secretary an opportunity for a hearing on the disapproval pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland, if the person wishes to contest the disapproval; and

(3) That to preserve the right to a hearing, the person shall contact the Secretary within 30 days of the receipt of the notice of disapproval.¹

Repairs.

An owner may make a repair to an aquatic facility or venue in accordance with this chapter without:

A. Obtaining a permit from the Secretary; or

B. Notifying the Secretary.

.09 [Permits for Operation.

A. A person may not operate a public pool or spa without an annual operating permit issued by the Secretary, except that in the case of a pool or spa that has received a partial approval of construction or alteration pursuant to Regulation .08E of this chapter, the Secretary may issue a nontransferable 30-day permit for the temporary operation of the pool or spa.

B. On an application form provided by the Secretary, a person shall apply to the Secretary for a permit to operate a public pool or spa at least 30 days before the pool or spa is scheduled to open for use for the first time and 30 days before a previous permit expires.

C. The Secretary shall:

(1) Issue a nontransferable permit to an owner whose public pool or spa is in compliance with this chapter; and

(2) When a public pool or spa does not meet the requirements of this chapter, deny the permit within 30 days by notifying the owner in writing:

(a) Of the reason or reasons for the denial,

(b) Of the action to be taken in order for the pool or spa to qualify for a permit,

(c) That the owner may request from the Secretary an opportunity for a hearing on this denial pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland, and

(d) That to preserve the right to a hearing, the person shall contact the Secretary within 30 days of the receipt of the notice of denial.

D. A person who operates a public pool or spa shall post the operating permit in a conspicuous place at the pool or spa site.¹

Approval After Construction, Non-substantial Alteration, or Substantial Alteration.

A. A person may not operate or permit the use of an aquatic facility or venue that has not received written approval from the Secretary after its construction, non-substantial alteration, or substantial alteration.

B. The Secretary shall conduct an inspection and shall:

(1) Grant written approval for an aquatic facility or venue if the **aquatic facility or venue** meets the requirements of this chapter, and the owner has received local approval for any building, electrical, plumbing, or other work that requires a local permit; or

(2) Deny approval for an aquatic facility or venue if the **aquatic facility or venue** does not meet the requirements of this chapter, or the owner has not received local approval for any building, electrical, plumbing, or other work that requires a local permit.

C. The Secretary shall grant written approval or deny approval of the aquatic facility or venue within 15 business days of inspecting.

D. If minor items that do not affect the health or safety of the public need to be corrected, the Secretary may issue a **conditional** approval for an aquatic facility or venue after construction, non-substantial alteration, or substantial alteration pending full compliance according to the following conditions:

(1) The owner shall fully comply with this chapter by the end of the 30 calendar day period in order to obtain written approval of an aquatic facility or venue; and

(2) If at the end of the 30 calendar day period, the Secretary is unable to approve an aquatic facility or venue pursuant to this regulation, the Secretary shall disapprove the aquatic facility or venue.

E. If the Secretary does not grant approval for an aquatic facility or venue after it is constructed, non-substantially altered, or substantially altered the Secretary shall notify the owner in writing:

(1) Of the reason or reasons for the disapproval;

(2) That the person may request, from the Secretary, an opportunity for a hearing on the disapproval pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland;

(3) That to preserve the right to a hearing, the person shall submit a written request for a hearing to the Secretary within 10 calendar days of the receipt of the notice of disapproval; and

(4) That the person shall submit a new plan review application and pay any applicable fees according to Regulation .06 of this chapter.

.10 [Suspension or Revocation of an Operating Permit.

A. Suspension.

(1) The Secretary may:

- (a) Suspend an operating permit if an owner or operator violates a requirement of this chapter; and
- (b) Summarily suspend an operating permit and close a public pool or spa when protection of the public health, safety, or welfare imperatively requires emergency action.

(2) The Secretary may summarily suspend an operating permit pursuant to §A(1)(b) of this regulation for any of the following:

- (a) Residual disinfection levels in violation of Regulation .44 of this chapter;
- (b) Sanitary water quality in violation of Regulation .48 of this chapter;
- (c) Water pH in violation of Regulation .45A(1) of this chapter;
- (d) Water clarity in violation of Regulation .45A(7) of this chapter;
- (e) A malfunctioning or nonworking recirculation or disinfection system;
- (f) A condition that may endanger the health and safety of an individual using a pool or spa, for example, a missing drain cover or other suction outlet entrapment hazard; and
- (g) A lifeguard has not been provided as required in Regulation .40 of this chapter.

B. Revocation. The Secretary may revoke a permit upon a repeated violation of a requirement of this chapter.

C. Hearing.

(1) In the case of the summary suspension of a permit pursuant to §A(1)(b) of this regulation, the Secretary shall provide a person with written notice of the violation and an opportunity for a hearing pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland.

(2) In the case of a permit suspension pursuant to §A(1)(a) of this regulation or a permit revocation pursuant to §B of this regulation, before taking action against a person, the Secretary shall provide written notice of

the facts that warrant the suspension or revocation and an opportunity for a hearing before suspending or revoking the permit.

(3) To preserve a right to a hearing, a person shall contact the Secretary within 30 days of the receipt of the notice.¹

Operating Permit.

A. A person may not operate an aquatic venue without an annual operating permit, issued by the Secretary, except that in the case of an aquatic venue that has received a conditional approval pursuant to Regulation .09D of this chapter, the Secretary may issue a nontransferable 30 calendar day permit for the temporary operation of the aquatic venue.

B. On an application form provided by the Secretary, an owner shall apply to the Secretary for an annual permit to operate an aquatic venue for, whichever day is later:

(1) At least 30 calendar days before the aquatic venue is scheduled to open for the first time; or

(2) Thirty calendar days before the previous permit expires.

C. The Secretary shall:

(1) Issue, for each aquatic venue, a nontransferable permit, meeting the requirements of §E of this regulation, to an owner whose aquatic venue is in compliance with this chapter as verified by a full compliance inspection completed within the last 12 months; and

(2) When an aquatic venue does not meet the requirements of this chapter, deny the permit within 30 business days by notifying the owner in writing:

(a) Of the reason or reasons for the denial;

(b) Of the action to be taken in order for the aquatic venue to qualify for a permit;

(c) That the owner may request from the Secretary an opportunity for a hearing on this denial pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland; and

(d) That to preserve the right to a hearing, the person shall contact the Secretary within 10 calendar days of the receipt of the notice of denial.

D. A person who operates an aquatic venue shall post the operating permit in a conspicuous place near the entrance to the aquatic venue.

E. An operating permit shall contain the following information:

(1) The name of the aquatic venue;

(2) The physical address of the aquatic venue;

(3) The name of the owner of the aquatic venue;

(4) The mailing address of the owner of the aquatic venue;

(5) A unique permit number;

(6) The operate to and from dates;

(7) The issue date of the permit;

(8) The signature of the Secretary or designee;

(9) The category of the aquatic venue;

(10) The classification of the aquatic venue;

(11) The type of aquatic venue;

(12) The volume of the aquatic venue in gallons;

(13) For a Category A aquatic venue, the theoretical peak occupancy;

(14) For a Category B aquatic venue, the user load;

(15) The status of night swimming; and

(16) A statement that says, "This permit is not transferable except as expressly provided by Rule or Regulation."

.11 [Inspections and Right of Entry.

A. The Secretary may enter, at a reasonable time, public or private property for inspecting and investigating conditions relative to the enforcement of this chapter.

B. A person may not deny or interfere with the Secretary's entry onto public or private property to inspect or to take enforcement action pursuant to this chapter.¹

Suspension or Revocation of an Operating Permit.

A. Suspension.

(1) The Secretary may:

(a) Suspend an operating permit if an owner or qualified operator violates a requirement of this chapter; and

(b) Summarily suspend an operating permit and close an aquatic venue when protection of the public health, safety, or welfare imperatively requires emergency action.

(2) The Secretary may summarily suspend an operating permit and immediately close an aquatic venue pursuant to §A(1) of this regulation for any critical violation as defined in Regulation .04B of this chapter.

(3) The Secretary may summarily suspend an operating permit and close an aquatic venue pursuant to §A(1) of this regulation for any major violation as defined in Regulation .04B of this chapter that is not corrected within 24 hours.

(4) The Secretary may reinstate an operating permit to an owner whose operating permit was suspended when the owner:

(a) Corrects the violation;

(b) Pays any applicable fees; and

(c) Complies with all applicable provisions of this chapter.

B. Revocation and Permitting After Revocation.

(1) The Secretary may revoke a permit for:

(a) Consecutive repeat violations of a requirement of this chapter; or

(b) An owner whose operating permit was revoked within the past two years, upon determination that the owner is in violation of the same requirement of this chapter that resulted in the previous revocation; and

(2) The Secretary may issue an operating permit to an owner whose operating permit was revoked:

(a) If 6 months has elapsed between the date of revocation and the date of application; and

(b) When the owner:

(i) Corrects the violations;

(ii) Applies for an operating permit;

(iii) Pays any applicable fees; and

(iv) Complies with all applicable provisions of this chapter.

C. Revocation Review

(1) Prior to the Secretary revoking an operating permit, the Secretary shall schedule a revocation review meeting between the local health department, Department of Health and Mental Hygiene, owner and **qualified** operator at the local health department or other mutually agreed upon location to review the facts that warrant the revocation.

(2) If the owner fails to appear at the revocation review meeting on the date listed in the Notice of Intent to Revoke, the Secretary may proceed with the revocation.

(3) Based on the facts that warrant the revocation, the Department shall determine whether or not to proceed with revoking the operating permit and provide that determination to the local health department, owner and **qualified** operator within 5 business days of the revocation review meeting.

D. Hearing.

(1) In the case of the summary suspension of a permit pursuant to §A(1)(b) of this regulation, the Secretary shall provide a person with written notice of the violation and an opportunity for a hearing pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland.

(2) In the case of a permit suspension pursuant to §A(1)(a) of this regulation, before taking action against a person, the Secretary shall provide written notice of the facts that warrant the suspension and an opportunity for a hearing before suspending the permit.

(3) In the case of a permit revocation pursuant to §B of this regulation, after conducting a revocation review meeting and before taking action against a person, the Secretary shall provide written notice of the facts that warrant the revocation and an opportunity for a hearing before revoking the permit.

(4) To preserve the right to a hearing, a person shall contact the Secretary within 10 calendar days of the receipt of the notice.

.12 [Conflict of Regulations.

An owner shall comply with:

A. The provision that establishes a higher standard for the promotion and protection of public health and safety if a provision of this chapter is in conflict with a local code, ordinance, statute, or other regulation; and

B. This chapter if there is a conflict between this chapter and the provisions of American National Standard for Public Swimming Pools or the American National Standard for Public Spas.¹

Inspections and Right of Entry.

A. The Secretary may:

(1) Enter, at a reasonable time, public or private property for the purpose of inspecting and investigating conditions relative to the enforcement of this chapter; and

(2) Publish inspections form according to Chapter 6.6.2 of the Model Aquatic Health Code.

B. A person may not deny or interfere with the Secretary's entry onto public or private property to inspect or to take enforcement action pursuant to this chapter.

C. The Secretary shall conduct:

(1) A full compliance inspection of the aquatic venue relative to the enforcement of this chapter at least once every 12 months;

(2) Except as provided in §C(4) of this regulation, a full compliance or routine inspection of the aquatic venue relative to the enforcement of this chapter at least once every 90 business days;

(3) For an aquatic venue that had a critical violation of this chapter on the previous inspection, a full compliance or routine inspection of the aquatic venue relative to the enforcement of this chapter at least once every 30 business days until the aquatic venue has no critical violations of this chapter on an inspection;

(4) For an aquatic venue that had no critical violations on the three previous consecutive inspections, a full compliance inspection of the aquatic venue relative to the enforcement of this chapter at least once every 12 months;

(5) Inspections in accordance with Chapter 6.6.1 of the Model Aquatic Health Code;

(6) An inspection of the aquatic venue within 2 business days of receiving a complaint; and

(7) An inspection of the aquatic venue within 24 hours of being aware of a drowning, near drowning or other incident.

D. An owner shall ensure that public information, health messaging and the last inspection form are posted according to Chapter 6.4.2.3 of the Model Aquatic Health Code.

E. All inspection shall be conducted using a form prescribed by the Secretary.

.13 [Standards for Recreational and Semipublic Pools.

An owner shall ensure that an existing, newly built, or altered recreational or semipublic pool is in compliance with:

A. This chapter;

B. Applicable State and local codes; and

C. The American National Standard for Public Swimming Pools.¹

Conflict of Regulations.

An owner shall comply with:

A. The provision that establishes a more stringent standard for the promotion and protection of public health and safety if a provision of this

chapter is in conflict with a local code, ordinance, statute, or other regulation; and

B. This chapter if there is a conflict between this chapter and the provisions of a document incorporated by reference.

.14 [Standards for Public Spas.

A. An owner shall ensure that an existing, newly built, or altered public spa is in compliance with:

- (1) This chapter;
- (2) Applicable State and local codes; and
- (3) The American National Standard for Public Spas.

B. An owner shall ensure that a swim spa has:

- (1) Clearly identified controls for the swim jets; and
- (2) A shut-off switch for the swim jets that is accessible from within the swim spa.

C. An owner shall ensure that a spa hydrojet circulation system:

- (1) Is not connected to a spa filtration system; and
- (2) Has a shut-off switch.**1**

Standards for Recreational and Semi-recreational Pools.

A. For a Category A aquatic venue, an owner shall ensure that a recreational or semi-recreational pool is in compliance with:

- (1) This chapter;
- (2) The Model Aquatic Health Code; and
- (3) Applicable State and local codes.

B. For a Category B aquatic venue, an owner shall ensure that a recreational or semi-recreational pool is in compliance with:

- (1) This chapter;

(2) Applicable State and local codes; and

(3) The American National Standard for Public Swimming Pools.

.15 [Standards for Limited Public-Use Pools.

A. An owner of a limited public-use pool shall ensure that:

(1) The construction of the pool is in compliance with:

(a) The American National Standard for Residential Inground Swimming Pools, if the pool is constructed in the ground or as a permanent structure in a building; or

(b) The American National Standard for Aboveground/Onground Residential Swimming Pools, if the pool is removable and located above ground or on ground;

(2) The barrier around the pool is in compliance with:

(a) Appendix E of the American National Standard for Residential Inground Swimming Pools, if the pool is used by a family day care home; or

(b) Local building codes, if the pool is donated for use by an organized group, agency, or other person for swimming lessons or water safety training;

(3) The pool and the operation of the pool are in compliance with Regulations .01—.05, .09—.12, .15, .19—.20, .24, .25B(3), .28, .31, .34, .37—.41, and .43—.54 of this chapter;

(4) The circulation system includes a properly sized flow meter to indicate the rate of flow;

(5) The dimensions of a diving area are:

(a) In conformance with Regulation .27B of this chapter; or

(b) If the diving area does not conform to Regulation .27B, the diving equipment is restricted from use by temporary barriers or is removed;

(6) A suction outlet is in compliance with Regulation .28 of this chapter to prevent suction entrapment;

(7) The following safety equipment is immediately available:

- (a) A first aid kit as recommended by the American Red Cross;
- (b) A mouth piece for CPR;
- (c) Disposable latex plastic gloves;
- (d) A light, strong rescue pole with a rescue hook designed for lifesaving;
- (e) A rescue tube for each lifeguard, if a lifeguard is on duty; and
- (f) A telephone for reaching 911 emergency service and the telephone location posted with the:
 - (i) Name and phone number of the nearest available police, fire, and ambulance or rescue unit,
 - (ii) Name of the facility or the name of the owner of the property where the pool is located, and
 - (iii) Location of the pool;
- (8) An individual certified in cardiopulmonary resuscitation (CPR) for the professional rescuer and certified in first aid is on duty while the pool is in use;
- (9) Pool chemicals are used and stored in accordance with manufacturers' directions and the material safety data sheet for a particular chemical; and
- (10) The pool has backflow protection:
 - (a) For a potable water supply, in conformance with COMAR 09.20.01, and
 - (b) For waste water, in conformance with COMAR 09.20.01.

B. An owner of a family day care home using a limited public-use pool shall ensure that water safety supervision is provided in compliance with COMAR 07.04.01.22.

C. An organized group, agency, or other person using a limited public-use pool for swimming lessons or water safety training shall ensure that water safety supervision is provided as follows:

- (1) An individual certified as an American Red Cross Water Safety Instructor, or with an equivalent certification that has been approved by the Secretary, is on site to conduct swimming lessons or water safety training; and

(2) Aquatic rescue staff are on site as follows:

(a) An individual certified in American Red Cross Basic Water Rescue, or with equivalent certification as approved by the Secretary, for each ten bathers, or fraction of ten bathers, if the pool:

(i) Is no more than 3 1/2 feet in depth at the shallow end of the swimming area,

(ii) Is no more than 5 feet in depth at the deepest point,

(iii) Has a rescue pole that can be practically used to reach beyond the midpoint of the pool and can be used within the pool enclosure without an obstruction, such as a wall or tall fencing, that restricts the use of the pole, and

(iv) Has no diving board, sliding board, or recreational play equipment, or the equipment is blocked off to restrict use; or

(b) An individual certified in American Red Cross Lifeguarding, or with an equivalent certification as approved by the Secretary, for each 25 bathers, or fraction of 25 bathers, if the pool:

(i) Is more than 3 1/2 feet in depth at the shallow end of the swimming area,

(ii) Has an area more than 5 feet in depth at the deepest point,

(iii) Does not have a rescue pole that can be practically used to reach beyond the midpoint of the pool, or an obstruction, such as a wall or tall fencing, exists within the pool enclosure that restricts the use of the pole, or

(iv) Has a diving board, a sliding board, or recreational play equipment that is not blocked off to restrict use.

D. This regulation does not prohibit an organized group, agency, or other person using a limited public-use pool for swimming lessons or water safety training from providing the portable safety equipment, aquatic safety personnel, pool operator, test kits, or other materials required for a limited public-use pool, to meet the requirements of this chapter.¹

Standards for Public Spas.

A. For a Category A aquatic venue, an owner shall ensure that a recreational or semi-recreational spa is in compliance with:

(1) This chapter;

(2) The Model Aquatic Health Code; and

(3) Applicable State and local codes.

B. For a Category B aquatic venue, an owner shall ensure that a recreational or semi-recreational spa is in compliance with:

(1) This chapter;

(2) Applicable State and local codes; and

(3) The American National Standard for Public Spas.

C. An owner shall ensure that a swim spa has:

(1) Clearly identified controls for the swim jets; and

(2) A shut-off switch for the swim jets that is accessible from within the swim spa.

D. An owner shall ensure that a spa hydrojet circulation system:

(1) Is not connected to a spa filtration system; and

(2) Has a timer shut-off switch which cannot be set for longer than 15 minutes located:

(a) Within sight of the spa; and

(b) At least 5 feet horizontally from the inside walls of the spa.

.16 [Standards for Water Recreational Attractions.

An owner shall ensure that:

A. A water recreational attraction:

(1) Is designed to eliminate or minimize safety hazards such as entrapment, slipping, abrasions, cuts, falls, trip hazards, impact injury, and drowning;

(2) Is in compliance with applicable State and local codes and this chapter; and

(3) Has a communication system for use by supervisors, watchers, and lifeguards;

B. Plans for supervision, attendants, and lifeguards are submitted as part of the construction plans and include safety personnel at all potentially hazardous activity areas;

C. A swimming pool slide is in conformance with the American National Standard for Public Swimming Pools and has:

(1) Attachments that firmly anchor the swimming pool slide;

(2) At the end of the slide a minimum water depth of:

(a) 4 feet, or a water depth in conformance with the manufacturer's installation instructions, for a distance of 10 feet along the slide centerline for a swimming pool slide that does not slow an individual's entry into the water or that drops the individual into the water; or

(b) 6 inches, or a water depth in conformance with the manufacturer's installation instructions, for a swimming pool slide designed to slow an individual to a near stop at the end of the slide;

(3) A cushioned landing mat below the end of a swimming pool slide if there is a potential for impact or abrasion injury;

(4) A centerline distance from the end of a slide to a wall, lifeline, transition point, centerline from another slide, or obstruction that eliminates the potential for an individual using the slide to strike a wall, lifeline, transition point, an individual using another slide, or an obstruction;

(5) A minimum side distance of 4 feet from the centerline of a slide to a wall, lifeline, transition point, or obstruction;

(6) A design that eliminates the potential for an individual to strike the pool deck or coping while traveling down the swimming pool slide;

(7) A slide end that extends beyond the pool wall, deck, and coping; and

(8) A minimum side distance of 12 feet between the centerline of a slide and a diving board, diving platform, or starting block;

D. A water slide:

(1) Complies with the conditions set forth at COMAR 09.12.63 as evidenced by written documentation from:

(a) The Department of Labor, Licensing, and Regulation; or

(b) If the water slide is not subject to regulation by the Department of Labor, Licensing, and Regulation, a registered professional engineer who certifies that the water slide meets the design criteria set forth at COMAR 09.12.63.07; and

(2) Exits to a plunge pool or slide runoff;

E. A wave pool is provided with an emergency shut-off switch at each guard station;

F. A tube ride has designated entry and exit points;

G. A spray pool has:

(1) A bottom that slopes from 1/4 inch per foot to 5/8 inch per foot to a drain with grate;

(2) No standing water; and

(3) No obstruction less than 4 feet in height;

H. A single-lane pool used for swimming laps has:

(1) A minimum width of 7 1/2 feet; and

(2) A sign on the deck that reads, "Warning: No Diving—Shallow Water" if the water depth is 5 feet or less;

I. A decorative fountain or waterfall installed in or connected to a pool or spa does not create a health or safety hazard;

J. A spray fixture, fountain, piece of play equipment, bridge, ramp, stair, float, swing, or other recreational equipment located within a pool or spa:

(1) Is designed to eliminate or minimize safety hazards such as entrapment, concealment, slipping, abrasions, cuts, punctures, falls, trip hazards, impact injury, and drowning;

- (2) Is limited to a shallow water area;
- (3) Has a color that contrasts with the pool or spa so that the structure is highly visible;
- (4) Has pipes or support columns that are at least 6 inches in diameter;
- (5) Is provided with an overhead clearance of at least 7 feet from the pool floor and 4 feet from the water surface where a person may walk under the fixture;
- (6) Is provided with recirculated, treated pool water for a spray, stream, or other flow of water; and
- (7) Is installed according to the manufacturer's directions;

K. The water surface is maintained at a level that allows the surface overflow system to operate properly;

L. At least two interconnected main drains are installed in the deepest part of a pool and are connected to the filtration system;

M. A pump reservoir or surge tank is provided for a slide or water feature circulation pump intake and:

- (1) Is made of concrete or other impervious material with a smooth slip-resistant finish;
- (2) Has inlets through a weir or a gravity-fed drain with a secure grate;
- (3) Has a volume equal to 2 minutes of the combined flow of all pumps connected to the reservoir or tank;
- (4) Is accessible only to authorized individuals;
- (5) Has pump intakes located in the pump reservoir that are designed to allow cleaning without danger of entrapment; and
- (6) The water velocity through grate or drain openings does not exceed 2 feet per second;

N. A slide or water feature circulation pump has a check valve on the discharge side; and

O. Returns from a filtration system are placed to provide even and positive circulation and to eliminate any dead spots.¹

Standards for Limited Public-Use Pools.

A. An owner of a limited public-use pool shall ensure that:

(1) The construction of the pool is in compliance with:

(a) The American National Standard for Residential Inground Swimming Pools, if the pool is constructed in the ground or as a permanent structure in a building; or

(b) The American National Standard for Aboveground/Onground Residential Swimming Pools, if the pool is removable and located above ground or on ground;

(2) The barrier around the pool is in compliance with:

(a) The American National Standard for Residential Inground Swimming Pools (ANSI/APSP/ICC-5 2011), if the pool is used by a family day care home; or

(b) Local building codes, if the pool is donated for use by an organized group, agency, or other person for swimming lessons or water safety training;

(3) The pool and the operation of the pool are in compliance with Regulations .01—.05, .10—.13, .16, .21—.22, .28, .29B(1), .32, .35, .38, .41—.45, and .47—.61 of this chapter;

(4) The circulation system includes a properly sized flow meter to indicate the rate of flow;

(5) The dimensions of a diving area are:

(a) In conformance with Regulation .31A of this chapter; or

(b) If the diving area does not conform to Regulation .31A, the diving equipment is restricted from use by temporary barriers or is removed;

(6) The following safety equipment is immediately available:

(a) A first aid kit that complies with Regulation .44A of this chapter;

(b) A blood borne pathogen control kit that complies with Regulation .44A of this chapter;

(c) A light, strong rescue pole that complies with Regulation .44A of this chapter;

(d) A rescue tube for each lifeguard, if a lifeguard is on duty; and

(e) A telephone for reaching 911 emergency service that complies with Regulation .44B of this chapter;

(7) An individual certified in CPR for the professional rescuer and certified in first aid is on duty while the pool is in use;

(8) Pool chemicals are used and stored in accordance with manufacturers' directions and the safety data sheet for the particular chemical; and

(9) The pool has backflow protection:

(a) For a potable water supply, in conformance with COMAR 09.20.01; and

(b) For waste water, in conformance with COMAR 09.20.01.

B. An owner of a family day care home using a limited public-use pool shall ensure that water safety supervision is provided in compliance with COMAR 13A.15.08.04.

C. An organized group, agency, or other person using a limited public-use pool for swimming lessons or water safety training shall ensure that water safety supervision is provided as follows:

(1) An individual certified as an American Red Cross Water Safety Instructor, or with an equivalent certification that has been approved by the Secretary, is on site to conduct swimming lessons or water safety training; and

(2) Aquatic rescue staff is on site as follows:

(a) An individual certified in American Red Cross Basic Water Rescue, or with equivalent certification as approved by the Secretary, for each ten bathers, or fraction of ten bathers, if the pool:

(i) Is no more than 3 1/2 feet in depth at the shallow end of the swimming area;

(ii) Is no more than 5 feet in depth at the deepest point;

(iii) Has a rescue pole that can be practically used to reach beyond the midpoint of the pool and can be used within the pool enclosure without an obstruction, such as a wall or tall fencing, that restricts the use of the pole; and

(iv) Has no diving board, sliding board, or recreational play equipment, or the equipment is blocked off to restrict use; or

(b) An individual certified in American Red Cross Lifeguarding, or with an equivalent certification as approved by the Secretary, for each 25 bathers, or fraction of 25 bathers, if the pool:

(i) Is more than 3 1/2 feet in depth at the shallow end of the swimming area;

(ii) Has an area more than 5 feet in depth at the deepest point;

(iii) Does not have a rescue pole that can be practically used to reach beyond the midpoint of the pool, or an obstruction, such as a wall or tall fencing, exists within the pool enclosure that restricts the use of the pole; or

(iv) Has a diving board, a sliding board, or recreational play equipment that is not blocked off to restrict use.

D. This regulation does not prohibit an organized group, agency, or other person using a limited public-use pool for swimming lessons or water safety training from providing the portable safety equipment, aquatic safety personnel, qualified operator, test kits, or other materials required for a limited public-use pool, to meet the requirements of this chapter.

.17 Standards for Public Wading Pools.

An owner shall ensure that a public wading pool is in compliance with:

A. This chapter;

B. Applicable State and local codes;

C. The American National Standard for Public Swimming Pools; and

D. Article 10.6 of the American National Standard for Public Spas.**1**

Standards for Water Recreational Attractions.

An owner shall ensure that:

A. For a Category A aquatic venue, a water recreational attraction complies with:

(1) The Model Aquatic Health Code; and

(2) Sections C—N of this regulation;

B. For a Category B aquatic venue, a water recreational attraction:

(1) Is designed to eliminate or minimize safety hazards such as entrapment, slipping, abrasions, cuts, falls, trip hazards, impact injury, and drowning;

(2) Is in compliance with applicable State and local codes and this chapter; and

(3) Has a communication system for use by supervisors, watchers, and lifeguards;

B. Plans for supervision, attendants, and lifeguards are submitted as part of the construction, non-substantial alteration or substantial alteration plans and include safety personnel at all potentially hazardous activity areas;

C. A swimming pool slide is in conformance with the American National Standard for Public Swimming Pools and has:

(1) Attachments that firmly anchor the swimming pool slide;

(2) At the end of the slide a minimum water depth of:

(a) 4 feet, or a water depth in conformance with the manufacturer's installation instructions, for a distance of 10 feet along the slide centerline for a swimming pool slide that does not slow an individual's entry into the water or that drops the individual into the water; or

(b) 6 inches, or a water depth in conformance with the manufacturer's installation instructions, for a swimming pool slide designed to slow an individual to a near stop at the end of the slide;

(3) A cushioned landing mat below the end of a swimming pool slide if there is a potential for impact or abrasion injury;

(4) A centerline distance:

(a) From the end of a slide to a wall, lifeline, transition point, centerline from another slide, or obstruction that eliminates the potential for an individual

using the slide to strike a wall, lifeline, transition point, an individual using another slide, or an obstruction; or

(b) In conformance with the manufacturer's installation instructions;

(5) A minimum side distance:

(a) Of 4 feet from the centerline of a slide to a wall, lifeline, transition point, or obstruction; or

(b) In conformance with the manufacturer's installation instructions;

(6) A design that eliminates the potential for an individual to strike the pool deck or coping while traveling down the swimming pool slide;

(7) A slide end that extends beyond the pool wall, deck, and coping; and

(8) A minimum side distance of 12 feet between the centerline of a slide and a diving board, diving platform, or starting block;

D. A water slide:

(1) Complies with the conditions set forth in COMAR 09.12.63 as evidenced by written documentation from:

(a) The Department of Labor, Licensing, and Regulation; or

(b) If the water slide is not subject to regulation by the Department of Labor, Licensing, and Regulation, a registered professional engineer who certifies that the water slide meets the design criteria set forth at COMAR 09.12.63.07; and

(2) Exits to a splash pool or slide runout as defined in COMAR 09.12.63.02 or a plunge pool;

E. A wave pool is provided with an emergency shut-off switch at each guard station;

F. A tube ride has designated entry and exit points;

G. A lazy river:

(1) Does not have:

(a) Handrails, steps, stairs, or propulsion jets that protrude into the river; or

(b) Obstructions around the perimeter of the lazy river, such as bridges or landscaping, that impact lifeguarding, sight lines, or rescue operations;

(2) Has:

(a) A means of access and egress provided at 150 foot intervals around the lazy river;

(b) A handhold, meeting the requirements of Regulation .25 of this chapter, on at least one side of the lazy river for the entire perimeter of the river; and

(c) Inlets which are:

(i) Equipped with directional fittings;

(ii) Positioned behind a grate with a maximum mesh size of 1½ inches; or

(iii) Plumbed to pumps connected to the same power source so that no one pump can be operated independently from the rest to ensure that all inlets have continuous flow through them while the lazy river is in operation;

(iv) Plumbed to pumps connected to audible and visual alarms which when activated will cause the operator to close the lazy river until corrective action is taken;

(3) That incorporates a bridge which spans the river shall install the bridge so that the minimum clearance from any structure overhead to the:

(a) Bottom of the lazy river is 7 feet; and

(b) Static water surface is 4 feet;

(4) Using inlets complying with §G(2) of this regulation is allowed to operate if a pump that provides current to a lazy river is not running; and

(5) Patron:

(a) Shall use an inner tube when utilizing the lazy river; and

(b) Shall not freely swim in the lazy river.

H. A decorative fountain or waterfall connected to a pool or spa circulation system does not create a health or safety hazard;

I. A spray fixture, fountain, piece of play equipment, bridge, ramp, stair, float, swing, or other recreational equipment located within a pool or spa:

(1) Is designed to eliminate or minimize safety hazards such as entrapment, concealment, slipping, abrasions, cuts, punctures, falls, trip hazards, impact injury, and drowning;

(2) Is limited to a shallow water area;

(3) Has a color that contrasts with the pool or spa so that the structure is highly visible;

(4) Has pipes or support columns that are at least 6 inches in diameter;

(5) Is provided with an overhead clearance of at least 7 feet from the pool floor and 4 feet from the water surface where a person may walk under the fixture;

(6) Is provided with recirculated, treated water for a spray, stream, or other flow of water; and

(7) Is installed according to the manufacturer's directions;

J. The water surface is maintained at a level that allows the surface overflow system to operate properly;

K. One or more suction outlet covers, meeting the requirements of Regulation .32 of this chapter, are connected to the filtration system;

L. A pump reservoir or surge tank is provided for a swimming pool slide, water feature, or water slide circulation pump intake and:

(1) Is made of concrete or other impervious material with a smooth slip-resistant finish;

(2) Has inlets through a weir or a gravity-fed drain with a secure grate;

(3) Has a volume equal to 2 minutes of the combined flow of all pumps connected to the reservoir or tank;

(4) Is accessible only to authorized individuals;

(5) Has pump intakes located in the pump reservoir that are designed to allow cleaning without danger of entrapment; and

(6) The water velocity through grate or drain openings does not exceed 2 feet per second;

M. A swimming pool slide, water slide or water feature circulation pump has a check valve on the discharge side; and

N. A return from a filtration system is placed to provide even and positive circulation and to eliminate any dead spots.

.18 Standards for Public Therapy Pools.

An owner shall ensure that a public therapy pool:

A. Is in compliance with:

- (1) This chapter;
- (2) Applicable State and local codes; and
- (3) The American National Standard for Public Swimming Pools;

B. Has:

- (1) A deck with a minimum width of 4 feet around at least 50 percent of the therapy pool that provides access to individuals using the therapy pool, not including any ramp, entrance area, or exercise area; and
- (2) A transition area between a shallow and a deep area that has:
 - (a) A floor slope that does not exceed 1 foot of drop to 3 feet of run; or
 - (b) Steps or ramps with handrails or a swing lift to transfer bathers from a shallow area to a deep area; and

C. Is used only for the purpose of supervised therapy.**1**

Standards for Public Wading Pools.

A. For a Category A aquatic venue, an owner shall ensure that a recreational or semi-recreational wading pool is in compliance with:

(1) This chapter;

(2) The Model Aquatic Health Code; and

(3) Applicable State and local codes.

B. For a Category B aquatic venue, an owner shall ensure that a recreational or semi-recreational wading pool is in compliance with:

(1) This chapter;

(2) Applicable State and local codes; and

(3) The American National Standard for Public Swimming Pools.

.19 [User Load.

A. The Secretary shall determine the user load, as defined in Regulation .05B(32) of this chapter, based on the following criteria:

(1) For a pool and its deck, one individual is allowed for:

(a) Every 12 square feet of water surface in shallow areas,

(b) Every 15 square feet of water surface in areas exceeding 5 feet of water depth, excluding a diving area, and

(c) The 300 square-foot diving area required for each diving board or diving platform;

(2) For a spa, one individual is allowed for every 9 square feet of water surface; and

(3) For a therapy pool, one individual is allowed for every:

(a) Therapy station, or

(b) 20 square feet of water surface, whichever is less.

B. An owner shall ensure that the:

(1) Number of individuals in a pool or spa and on the required deck area does not exceed the user load as set forth in §A of this regulation;

(2) Number of individuals using an enclosed pool or spa area or a spectator area is in conformance with local fire code requirements; and

(3) User load of a pool or spa is posted in a conspicuous place at the pool or spa.]

Standards for Public Therapy Pools.

A. For a Category A aquatic venue, an owner shall ensure that a therapy pool:

(1) Is in compliance with:

(a) This chapter;

(b) Applicable State and local codes;

(c) The Model Aquatic Health Code; and

(d) Sections B(2)—(3) of this regulation;

B. For a Category B aquatic venue, an owner shall ensure that a therapy pool:

(1) Is in compliance with:

(a) This chapter;

(b) Applicable State and local codes; and

(c) The American National Standard for Public Swimming Pools;

(2) Has:

(a) A deck with a minimum width of 4 feet around at least 50 percent of the therapy pool that provides access to individuals using the therapy pool, not including any ramp, entrance area, or exercise area; and

(b) A transition area between a shallow and a deep area that has:

(i) A floor slope that does not exceed 1 foot of drop to 3 feet of run;

(ii) Steps;

(iii) A ramp with handrails;

(iv) A swing lift to transfer bathers from a shallow area to a deep area; or

(v) A floor slope that exceeds 1 foot of drop to 3 feet of run that is equipped with a protective barrier; and

(3) Is used only for the purpose of supervised therapy.

.20 [Public Pool or Spa Site.

An owner shall ensure that a public pool or spa site:

A. Drains away from the pool or spa area;

B. Has water and waste water facilities that conform to the requirements of:

(1) COMAR 09.20.01,

(2) COMAR 26.04.01-----26.04.04, and

(3) Local plumbing code requirements;

C. Has a walkway between a pool or spa and appurtenant buildings such as a bathhouse or equipment room; and

D. Complies with applicable State and local codes.**1**

Standards for Spray Grounds.

A. For a Category A aquatic venue, an owner shall ensure that a spray ground is in compliance with:

(1) This chapter;

(2) Applicable State and local codes; and

(3) The Model Aquatic Health Code.

B. For a Category B aquatic venue, an owner shall ensure that a spray ground:

(1) Is in compliance with:

(a) This chapter; and

(b) Applicable State and local codes;

(2) Except when it is within a barrier, is equipped with a mechanism for controlling the operation of a spray ground, which can be locked to prevent unauthorized use of the spray ground; and

(3) Has a pump reservoir or surge tank provided for a spray ground circulation pump intake and:

(a) Is made of concrete or other impervious material with a smooth slip-resistant finish;

(b) Has inlets through a weir or a gravity-fed drain with a secure grate;

(c) Has a minimum volume equal to 2 minutes of the combined flow of all pumps connected to the reservoir or tank;

(d) Is accessible only to authorized individuals;

(e) Has pump intakes located in the pump reservoir that are designed to allow cleaning without danger of entrapment; and

(f) The water velocity through grate or drain openings does not exceed 2 feet per second.

.21 [Barriers.

A. Except as set forth in §§B, C, and D of this regulation, an owner shall ensure that a recreational pool, semipublic pool, or public spa, including the required deck area, is completely surrounded by a barrier that complies with the following requirements:

(1) The top of the barrier is at least 72 inches above grade measured on the side of the barrier that faces away from the pool or spa;

(2) The maximum vertical clearance between grade and the bottom of the barrier is 4 inches measured on the side of the barrier that faces away from the pool or spa;

(3) Except when the entrance gate is open, an opening in the barrier and in the gate does not allow passage of a sphere 4 inches in diameter;

(4) Fence pickets have a maximum separation of 4 inches;

(5) The barrier does not have openings or footholds that make the barrier easy to climb;

(6) A barrier with horizontal members less than 45 inches apart measured top to top does not have:

(a) Vertical openings greater than 1-3/4 inches in width; and

- (b) Horizontal members on the outside of the barrier;
 - (7) The barrier does not have decorative cutouts greater than 1-3/4 inches in width;
 - (8) A chain link fence has a maximum mesh size of 2-1/4 inches;
 - (9) A lattice fence has a maximum mesh size of 1-3/4 inches;
 - (10) The barrier main access gate:
 - (a) Is located toward the shallow end of a pool;
 - (b) Has a latch release located at least 54 inches from grade level;
 - (c) Is lockable;
 - (d) Is hung to open away from the pool or spa;
 - (e) Has a minimum width of 4 feet; and
 - (f) Complies with Regulation .37 of this chapter; and
 - (11) Doors and windows that open into the pool or spa area enclosed by the barrier have locks or latches to prevent unauthorized entry.
- B. An owner shall ensure that a barrier at a semipublic pool or semipublic spa:
- (1) Has a minimum height of 60 inches;
 - (2) Has a gate that is self-closing and self-latching; and
 - (3) Complies with the requirements in §A(2)—(11) of this regulation.
- C. Except as provided in §D of this regulation, an owner may surround a pool and spa, multiple pools, or multiple spas at one facility with one barrier instead of separate barriers for each pool or spa.
- D. An owner shall ensure that a wading pool or infant pool is separated from a pool or spa by a barrier that has:
- (1) A minimum height of 36 inches;

(2) A maximum 2-inch separation between the deck and the bottom of the barrier;

(3) No opening that allows the passage of a sphere 4 inches in diameter; and

(4) An entrance gate with a latch.¹

User Load and Theoretical Peak Occupancy.

A. The Secretary shall determine the user load, as defined in Regulation .04B of this chapter, for each aquatic venue based on the following criteria:

(1) Except for a therapy pool, for a pool, one individual is allowed for:

(a) Every 12 square feet of water surface in shallow areas;

(b) Every 15 square feet of water surface in areas exceeding 5 feet of water depth, excluding a diving area; and

(c) The 300 square-foot diving area required for each diving board or diving platform;

(2) For a spa, one individual is allowed for every 9 square feet of water surface;

(3) For a therapy pool, one individual is allowed for every:

(a) Therapy station; or

(b) 20 square feet of water surface, whichever is less; and

(4) For a spray ground, one individual is allowed for every 10 square feet of splash zone.

C. An owner shall ensure that:

(1) For a Category A aquatic venue, the:

(a) Number of individuals using the aquatic venue does not exceed:

(i) The theoretical peak occupancy as set forth in Chapter 4.1.2.3.5 of the Model Aquatic Health Code; and

(ii) The local fire code requirements; and

(b) Theoretical peak occupancy for each aquatic venue is posted at the entrance to each aquatic facility or venue; and

(2) For a Category B aquatic venue, the:

(a) Number of individuals using an aquatic venue does not exceed:

(i) The user load as set forth in §A of this regulation; and

(ii) The local fire code requirements; and

(b) User load for each aquatic venue is posted at the entrance to each aquatic facility or venue.

.22 [Decks.

A. An owner shall ensure that:

(1) A deck at a recreational or semipublic pool:

(a) Completely surrounds the pool;

(b) Is continuous with a minimum unobstructed width of 4 feet and an average width of 6 feet, and

(c) Is in conformance with the American National Standard for Public Swimming Pools;

(2) A deck at a public spa is in conformance with the American National Standard for Public Spas;

(3) The slope of a deck is away from a pool or a spa, toward points of disposal, and not less than 1/4 inch per foot, or greater than 1/2 inch per foot;

(4) The deck has drainage to deck drains or other points of disposal;

(5) The deck's surface is slip resistant or nonskid;

(6) An expansion joint between the coping and deck is sealed with a durable, watertight sealant;

(7) A brick, stone, aggregate, or similar deck surface has a subdeck in the required deck area;

(8) A wood deck has a gravel and plastic ground barrier or a concrete subdeck in the required deck area; and

(9) The deck does not trap dirt or support or harbor algae.

B. An owner may:

(1) Include the pool or spa coping in the measurement of the deck width; and

(2) Have ladders, handrails, lifeguard stands, structures for use by disabled individuals, and other pool equipment on the deck.

C. Except as provided in §B(2) of this regulation, an owner may not have light poles, structural supports, decorative fountains, waterfalls, and other obstacles or obstructions within 4 feet of a pool or within the required deck area of a spa.

D. An owner shall ensure that an anchor for a fixture used to support a backstroke flag, volleyball net, or similar recreational equipment is fitted with a cap or plug that is flush with the deck when the anchor is not in use. **1**

Aquatic Venue Site.

An owner shall ensure that an aquatic venue site:

A. Drains away from the aquatic venue area;

B. Has water and waste water facilities that conform to the requirements of:

(1) COMAR 09.20.01;

(2) COMAR 26.04.01—26.04.04; and

(3) Local plumbing code requirements;

C. Has a walkway between an aquatic venue and appurtenant buildings such as a bathhouse or equipment room;

D. Complies with applicable State and local codes; and

E. For a Category A aquatic venue, complies with the Model Aquatic Health Code.

.23 **1Equipment Rooms.**

An owner shall ensure that a recreational pool, semipublic pool, or public spa has an equipment room that:

A. Houses the pool or spa circulation, filtration, and disinfection equipment;
and

B. Has:

- (1) Weathertight construction to prevent the entrance of precipitation;
- (2) Adequate floor area for safe access to all equipment;
- (3) A minimum ceiling height of 7 feet 6 inches;
- (4) A waterproof floor that drains to a floor drain;
- (5) A lockable entrance door that allows complete and unencumbered access to the equipment room;
- (6) A minimum of 20 footcandles of artificial illumination;
- (7) Ventilation sized at 2 cubic feet per minute per square foot of floor area that is:
 - (a) Mechanical exhaust ventilation if chemicals are used or stored in the equipment room, or
 - (b) Natural or mechanical exhaust ventilation if chemicals are not used or stored in the equipment room;
- (8) Adequate make-up air to replace the air exhausted by the ventilation system;
- (9) A hose bibb with an atmospheric vacuum breaker; and
- (10) A water-resistant data sheet that is posted in a conspicuous place for each pool or spa and that includes the following information:
 - (a) Volume of water,
 - (b) Minimum turnover rate,
 - (c) Maximum filter capacity,
 - (d) Water surface area,

- (e) Length of water perimeter,
- (f) Maximum bather load, and
- (g) Operating instructions for valves and equipment.¹

Barriers.

A. For a Category A aquatic venue, an owner shall ensure that an aquatic venue, including the required deck area, is completely surrounded by a barrier that complies with Chapter 4.8.6 of the Model Aquatic Health Code.

B. For a Category B aquatic venue:

(1) Except as set forth in §§B(2)–(7) of this regulation, an owner shall ensure that an aquatic venue, including the required deck area, is completely surrounded by a barrier that complies with the following requirements:

(a) The top of the barrier is at least 72 inches above grade measured on the side of the barrier that faces away from the aquatic venue;

(b) The maximum vertical clearance between grade and the bottom of the barrier is 4 inches measured on the side of the barrier that faces away from the aquatic venue;

(c) Except when the entrance gate is open, an opening in the barrier and in the gate does not allow passage of a sphere 4 inches in diameter;

(d) Fence pickets have a maximum separation of 4 inches;

(e) The barrier does not have openings or footholds that make the barrier easy to climb;

(f) A barrier with horizontal members less than 45 inches apart measured top to top does not have:

(i) Vertical openings greater than 1-3/4 inches in width; and

(ii) Horizontal members on the outside of the barrier;

(g) The barrier does not have decorative cutouts greater than 1-3/4 inches in width;

(h) A chain link fence has a maximum mesh size of 2-1/4 inches;

(i) A lattice fence has a maximum mesh size of 1-3/4 inches;

(j) The barrier main access gate:

(i) Is located toward the shallow end of the aquatic venue;

(ii) Has a latch release located at least 54 inches from grade level;

(iii) Is locked to prevent unauthorized access when the aquatic venue is not open for use;

(iv) Is hung to open away from the aquatic venue; and

(v) Has a minimum width of 4 feet;

(k) An access gate:

(i) Has a latch release located at least 54 inches from grade level;

(ii) Is locked to prevent unauthorized access when the aquatic venue is not open for use; and

(iii) Is hung to open away from the aquatic venue; and

(l) Doors and windows that open into the aquatic venue area enclosed by the barrier have locks or latches to prevent unauthorized entry;

(2) An owner shall ensure that a barrier at a semi-recreational aquatic venue:

(a) Has a minimum height of 60 inches;

(b) Has gates that are:

(i) Self-closing; and

(ii) Self-latching; and

(c) Complies with the requirements in §B(1)(a)–(l) of this regulation;

(3) Except as provided in §B(4) of this regulation, an owner may surround an aquatic venue or multiple aquatic venues at one facility with one barrier instead of separate barriers for each aquatic venue;

(4) Except as provided by §§B(5)—(8) of this regulation, an owner shall ensure that a wading pool or a spray ground is separated from all other bodies of water by a barrier that:

(a) Has:

(i) A minimum height of 36 inches;

(ii) A maximum 2-inch separation between the deck and the bottom of the barrier;

(iii) No opening that allows the passage of a sphere 4 inches in diameter; and

(iv) Entrance gates that are self-closing, self-latching and hung to open toward the wading pool or spray ground; and

(b) Except for §B(1)(j) and (k) of this regulation, complies with the requirements in §B(1)(b)—(l);

(5) An owner of a spray ground that is not part of an aquatic facility with a body of water is not required to provide a barrier;

(6) An owner of a wading pool or spray ground is not required to separate the wading pool and spray ground with a barrier;

(7) An owner of a spray ground that is part of an aquatic facility with a body of water is not required to provide a barrier if:

(a) An unobstructed path with a minimum horizontal distance of 30 feet is provided between the edge of the spray ground deck closest to the body of water and the water's edge closest to the spray ground; or

(b) An obstructed path with a minimum horizontal distance of 15 feet is provided between the edge of the spray ground deck closest to the body of water and the water's edge closest to the spray ground; and

(8) An owner shall ensure that:

(a) Exiting from an aquatic venue while an aquatic venue is open does not require the use of a key, keycard, or combination; and

(b) Except when the gates to the aquatic venue are equipped with panic hardware that would allow patrons to exit the deck area even when the aquatic venue is closed, fire exits do not exit onto an aquatic venue deck.

.24 I Pipe Material.

An owner shall ensure that pipe material for a public pool or spa conforms to COMAR 09.20.01.1

Decks.

A. For a Category A aquatic venue, an owner shall ensure that all decks comply with Chapter 4.8 of the Model Aquatic Health Code.

B. For a Category B aquatic venue, an owner shall ensure that:

(1) A perimeter deck at a public pool or spray ground is:

(i) Continuous, with a minimum unobstructed width of 4 feet and an average width of 6 feet; and

(ii) In conformance with the American National Standard for Public Swimming Pools; and

(c) Is not:

(i) Constructed of wood; and

(ii) More than 30 inches below the static water level;

(2) A perimeter deck at a public spa is:

(a) In conformance with the American National Standard for Public Spas; and

(b) Not constructed of wood;

(3) The slope of a deck is away from an aquatic venue, toward points of disposal, and not less than 3/16 inch per foot, or greater than 1/2 inch per foot;

(4) The deck has drainage to deck drains or other points of disposal in compliance with COMAR 26.04.02;

(5) The deck's surface is slip resistant or nonskid;

(6) An expansion joint between the coping and deck is sealed with a durable, watertight sealant;

(7) A brick, stone, aggregate, or similar deck surface has a subdeck;

(8) A wood deck has a gravel and plastic ground barrier or a concrete subdeck;

(9) The deck does not trap dirt or support the harborage of algae; and

(10) Carpet is not installed on the deck surface of the perimeter or pool deck.

B. An owner may:

(1) Include the deck level coping of a pool or spa in the measurement of the deck width; and

(2) Have ladders, handrails, lifeguard stands, structures for use by disabled individuals, and other pool equipment on the deck.

C. Except as provided in §B(2) of this regulation, an owner may not have light poles, structural supports, decorative fountains, waterfalls, and other obstacles or obstructions within 4 feet of a pool or within the required deck area of a spa or spray ground.

D. An owner shall ensure that an anchor for a fixture used to support a backstroke flag, volleyball net, or similar recreational equipment is fitted with a cap or plug that is flush with the deck when the anchor is not in use.

.25 [Circulation Systems.

A. Gauges and Release Valves. An owner shall ensure that the circulation system for a recreational pool, semipublic pool, or public spa includes the following:

(1) A pressure gauge on the filter or on the influent side of the filter piping;

(2) A pressure gauge on the effluent side of the filter piping;

(3) A vacuum or compound gauge on the influent side of a pump;

(4) A flow meter that:

(a) Indicates the rate of flow through the circulation system;

- (b) Has a permanent scale readable in gallons per minute;
- (c) Is accurate to within 10 percent of the actual flow; and
- (d) Reads in the range encompassing the minimum and maximum flow rate;
- (5) A thermometer on the return line to a pool or spa if the circulation system includes a heating system; and
- (6) A manually operated air release valve on a pressure filter or a separation tank, or both.

B. Turnover Rate. An owner shall ensure that:

(1) A recreational pool, semipublic pool, or public spa is constructed to produce the following minimum turnover rates, with continuous 24-hour flow:

(a) Pools for swimming and diving: Minimum turnover rate = volume of pool in gallons/480 minutes;

(b) Pools for water recreational attractions and therapy: Minimum turnover rate = volume of pool in gallons/360 minutes;

(c) Pools for wading have a minimum turnover rate equal to the greater of:

(i) Volume of pool in gallons/120 minutes; or

(ii) The minimum flow required for the skimmer system and main drain to operate according to the manufacturer's specifications; and

(d) Spas: Minimum turnover rate = volume of spa/30 minutes;

(2) The flow through a circulation system is maintained between the minimum turnover rate and the design capacity of the filter system and associated piping; and

(3) A limited public-use pool has a turnover rate in conformance with:

(a) American National Standard for Residential Inground Swimming Pools; or

(b) American National Standard for Aboveground/Onground Residential Swimming Pools.

C. Head Loss Calculations. An owner of a recreational pool, semipublic pool, or public spa shall ensure that head loss calculations include the following:

(1) Piping head loss, found by using:

(a) The Hazen-Williams formula which is: piping head loss per 100 feet of pipe = $0.2083 (100 / C)^{1.852} (Q^{1.852} / D^{4.865})$

where: D = nominal inside diameter of pipe;

Q = gpm;

C = constant for inside roughness of pipe; or

(b) Standard engineering tables;

(2) Equipment head loss, including filters, valves, heaters, and other circulation equipment, based on the manufacturers' specifications for the equipment at the design flow rate, and filter pressure differential with the filter in a clean and in a dirty condition;

(3) Elevation of pump suction and discharge in relation to the pool or spa water surface level; and

(4) Determination of the total dynamic head of the circulation system for use in pump selection.

D. Surface to Bottom Flow Ratio.

(1) An owner of a recreational pool, semipublic pool, or public spa shall ensure that:

(a) Piping for surface outlets is designed to accommodate 80 percent of the flow; and

(b) Piping for bottom outlets is designed to accommodate 20 percent of the flow.

(2) An owner of a recreational pool or semipublic pool may have a gutter surface overflow system with a flow design of 50 percent from the surface outlets and 50 percent from the bottom outlets.

E. Filter Capacity. An owner of a recreational pool, semipublic pool, or public spa shall ensure that a filter:

- (1) Operates within the filter design flow rate;
- (2) Has a filtration capacity sufficient to operate in the range between the minimum turnover rate and the filter design flow rate when the circulation system is at the:
 - (a) Lowest level of calculated total dynamic head when the filter is in a clean condition; and
 - (b) Highest level of calculated total dynamic head when the filter pressure differential is at the maximum allowed in Regulation .43E of this chapter.

F. Interconnections Between Pools. An owner of a recreational pool, semipublic pool, or public spa shall ensure that a pool is not interconnected with a:

- (1) Spa or wading pool except during the filling of a spa or wading pool; and
- (2) Spray pool.¹

Handholds.

An owner shall ensure that a handhold that complies with Chapter 4.5.14 of the Model Aquatic Health Code is installed anytime the water depth of the aquatic venue exceeds 24 inches.

.26 ¹Circulation System Components.

A. Except as provided in §B of this regulation, an owner of a recreational pool, semipublic pool, or public spa shall ensure that circulation system components, including skimmers, pumps, filters, multiport valves, adjustable output rate chemical feeders, flow-through chemical feeders, chemical process equipment, chlorine generators, ion generators, and other pool and spa equipment comply with Circulation System Components and Related Materials for Pools, Spas/Hot Tubs.

B. The Secretary shall accept swimming pool, spa, or hot tub circulation system components as meeting the requirements set forth in §A of this regulation if these items are in the current published NSF listing of swimming pool, spa, or hot tub circulation system components or a listing from organizations accredited by the American National Standards Institute (ANSI) for the certification of circulation system components.

C. Chemical Feeder and Process Equipment. An owner of a recreational pool, semipublic pool, or public spa shall ensure that the capacity of chemical feeder and process equipment is adequate to:

- (1) Provide the minimum required disinfectant residual to the pool or spa water, as required in Regulation .44A of this chapter; and
- (2) Establish breakpoint when the combined chlorine level is over 0.2 ppm.

D. Chlorine Gas Feeders. An owner of a recreational pool, semipublic pool, or public spa shall ensure that the:

- (1) Equipment installation, and operation of a chlorine gas feeder are in compliance with the American National Standard for Public Swimming Pools, with the exception that the word "shall" is substituted for the word "should", and the owner is required to comply with the specifications of Appendix E; and
- (2) Recirculated water is treated downstream of the chlorine gas injection point to maintain the water's pH between 7.2 and 7.8.

E. Vacuum Systems.

- (1) An owner shall ensure that a recreational pool, semipublic pool, or public spa has a vacuum system for cleaning the pool or spa floor.
- (2) An owner of a recreational pool, semipublic pool, or public spa may use skimmer outlet pipes for vacuum purposes for circulation systems with four or fewer skimmers.
- (3) For circulation systems with more than four skimmers or a gutter system, an owner of a recreational pool, semipublic pool, or public spa shall ensure that a vacuum system is provided that is separate from the skimmer or gutter system.
- (4) If vacuum fittings are provided within a recreational pool, semipublic pool, or public spa, the owner shall ensure that the fittings are:
 - (a) Located at convenient locations approximately 1 foot below the water surface; and
 - (b) Provided with flush removable caps.

(5) When the vacuum system is an integral part of the circulation system, an owner of a recreational pool, semipublic pool, or public spa shall ensure that the vacuum line connection is before the pump hair and lint strainer.

F. Carbon Dioxide Feeders. An owner of a recreational pool, semipublic pool, or public spa shall ensure that a carbon dioxide feeder system is:

(1) Installed and maintained in accordance with the manufacturer's specifications;

(2) Located in a ventilated area; and

(3) Secured to prevent damage to the gas cylinder if the cylinder is subject to tipping.

G. Ozone Systems. An owner of a recreational pool, semipublic pool, or public spa shall ensure that:

(1) An ultraviolet light ozone system is used and installed according to Circulation System Components and Related Materials for Pools, Spas/Hot Tubs;

(2) A corona discharge ozone system is used and installed according to Circulation System Components and Related Materials for Pools, Spas/Hot Tubs, and the following requirements:

(a) The system is designed to provide a minimum concentration of ozone generated to be 1.5 percent by weight;

(b) The ozone gas is diffused through a static mixer into a contact column with a sidestream flow of recirculated water equal to a minimum of 5 percent of the required turnover rate;

(c) The system is designed to provide a contact time of:

(i) 2 minutes when used in conjunction with a chlorine disinfectant; or

(ii) 1 minute when used in conjunction with a bromine disinfectant;

(d) The system provides a minimum contact time value of 0.5 milligram/liter in the contact column when the contact time value equals the concentration of dissolved ozone in milligrams/liter times the contact time in minutes;

- (e) The air feed, which is natural or oxygen enriched air, is filtered to remove particulates and dehumidified to a minimum dew point of minus 60°C before the ozone generating chamber;
 - (f) An ozone gas feed line is ozone resistant;
 - (g) Valves are provided to control flow through the system;
 - (h) Offgas venting from the contact column is:
 - (i) Equipped with an ozone destruct system that removes all ozone before release to the atmosphere; or
 - (ii) Returned to the main recirculation line when used in conjunction with a bromine disinfectant;
 - (i) When necessary, a foam suppression system is provided before offgas venting;
 - (j) The oxidation reduction potential of the sidestream after contact and before dissolved ozone removal is a minimum of 650 millivolts;
 - (k) The dissolved ozone is removed from the sidestream using granulated activated carbon before remixing with the recirculated water when used in conjunction with a chlorine disinfectant;
 - (l) The ozone generating system shuts off if the water recirculating system shuts off or if the vacuum is lost on the ozone gas output line;
 - (m) The ozone gas output is under negative pressure or a vacuum;
 - (n) The ozone generation area is ventilated at 2 cfm per square foot of floor area to prevent the build up of excess ozone; and
 - (o) The recirculated water is treated to maintain the pH between 7.2 and 7.8.
- H. An owner of a recreational pool, semipublic pool, or public spa may connect an equalization line for a skimmer to the main drain line in a wading pool, or other pool that does not have sufficient water depth, for the installation of the equalizer line through the pool wall below the skimmer throat.¹

Infinity Edges.

A. For a Category A aquatic venue, an owner shall ensure that aquatic venues utilizing infinity edges comply with Chapter 4.5.15 of the Model Aquatic Health Code.

B. For a Category B aquatic venue, an owner shall ensure that:

(1) The length of an infinity edge shall be no more than 30 feet long when in water depths greater than five feet;

(2) Handholds conforming to the requirements of Regulation .25 of this chapter are provided for infinity edges;

(3) Infinity edges are constructed of reinforced concrete or other impervious and structurally rigid materials, and designed to withstand the loads imposed by pool water, bathers, and adjacent soils or structures;

(4) Troughs, basins, or capture drains designed to receive the overflow from infinity edges:

(a) Are watertight and free from structural cracks;

(b) Have a non-toxic, smooth, and slip-resistant finish; and

(c) Are equipped with grates;

(5) The maximum height of the wall outside of the infinity edge does not exceed 30 inches to the adjacent grade and capture drain;

(6) The perimeter deck of an infinity edge pool must surround a minimum of 50 percent of the pool;

(7) The maximum height of the wall outside of the infinity edge shall be a minimum of 16 inches and a maximum of 19 inches to the adjacent grade and capture drain for the deck to be considered a perimeter deck; and

(8) The height of the wall outside of the infinity edge is at least 16 inches to the adjacent grade and capture drain.

.27 IDiving Area and Equipment.

An owner of a public pool shall ensure that:

A. A pool used for accredited competitive aquatic events as defined in §3 of the American National Standard for Public Swimming Pools is in compliance with §6.4.1 of American National Standard for Public Swimming Pools;

B. The dimensions of a pool diving area are in conformance with the following minimum dimensions and explanatory diagram:

(1) Minimum dimensions:

Diving Board Height (H) Above Water

<i>Dimension</i>	<i>Deck Level Board (20" or less)</i>			<i>One Meter Diving Board (More than 20" but not more than 39")</i>			<i>Three Meter Diving Board (More than 3'3", but not more than 10'0")</i>	
	<i>Minimum</i>	<i>Preferr ed</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Preferr ed</i>	<i>Maximum</i>	<i>Minimum</i>	<i>Preferr ed</i>
D ₀	6'0"	—	—	6'0"	—	—	6'0"	—
D ₁	9'0"	10'0"	—	10'0"	12'0"	—	12'6"	13'0"
D ₂	2'9"	3'0"	3'6"	3'0"	3'0"	—	3'0"	3'0"
O _h	2'6"	3'0"	3'0"	4'10 1/2"	6'0"	—	4'10 1/2"	6'0"
L ₁	15'0"	16'0"	—	18'0"	20'0"	—	20'0"	20'0"
L ₂	12'0"	15'0"	—	15'0"	21'0"	—	22'6"	24'0"
L ₃	15'0"	24'0"	—	15'0"	24'0"	—	24'0"	24'0"
S ₁	—	1:2	1:10	—	1:12	1:12	1:12	1:12
S ₂	—	—	1:3	—	—	1:3	1:3	1:3
B ₁	6'0"	6'0"	9'0"	9'0"	16'0"	—	—	16'0"

Where:

D₀ = Water depth at cove radius;

D₁ = Water depth below board plummet line maintained for entire length of L₁ allowing for slope to the drain;

D₂ = Water depth at shallow end of pool;

O_h = Length of board overhang above pool;

L₁ = Length from below board plummet line to start of transition slope;

L_2 = Length of transition zone;

L_3 = Length of shallow end of pool;

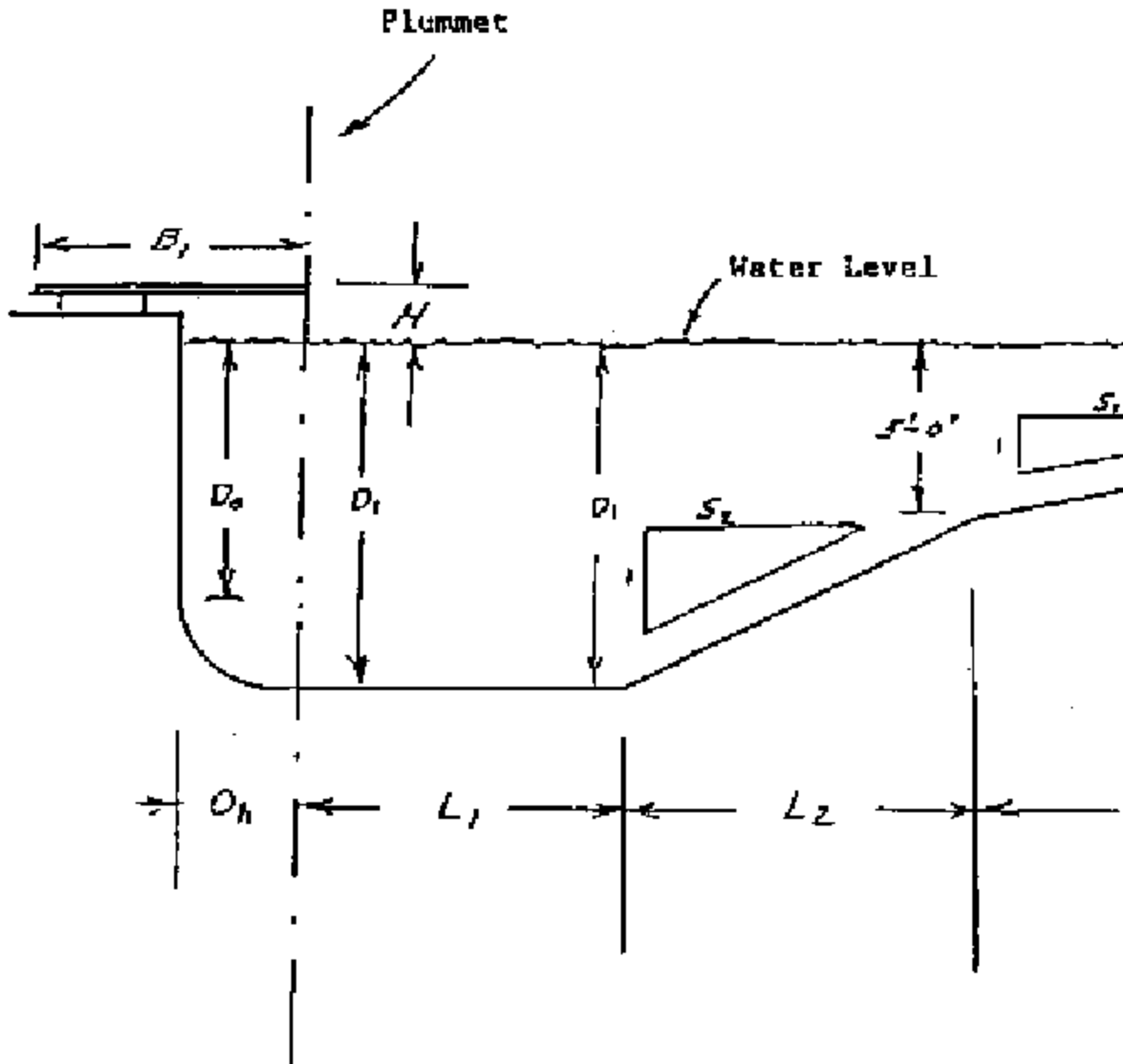
S_1 = Shallow end slope ratio;

S_2 = Transition slope ratio; and

B_1 = Board length.

(2) Explanatory diagram

(2) Explanatory diagram:



(3) The transitional radius from wall to floor are in conformance with Article IV of the American National Standard for Public Swimming Pools.

C. Diving equipment is installed in compliance with §§7.2.5—7.2.5.6 of the American National Standards for Public Swimming Pools;

D. Unobstructed clearance is provided for a diving board in conformance with the following minimum dimensions:

(1) A minimum height of:

(a) 13 feet measured upward from the plummet of a diving board; or

(b) Greater than 13 feet if specified by the manufacturer of the diving board;

(2) A clearance as required in §D(1) of this regulation extending:

(a) 16 feet forward of the plummet;

(b) 8 feet behind the plummet; and

(c) 8 feet to both sides of the plummet;

(3) A minimum distance of 10 feet between the plummets of adjacent diving boards; and

(4) A minimum distance between a diving board plummet and a side wall of:

(a) 10 feet for a diving board 20 inches or less above the water line; and

(b) 12 feet for a diving board greater than 20 inches above the water line;

E. Diving boards in excess of 10 feet above the water line and diving platforms are in compliance with §7.2.4 of the American National Standard for Public Swimming Pools; and

F. A starting block:

(1) Is located on the pool deck so that a swimmer dives into a minimum of 5 feet water depth; or

(2) At a pool constructed before February 10, 1997, is located so that a swimmer dives into a minimum of:

(a) 5 feet water depth when the starting block is used without supervision;
or

(b) 4 feet water depth when the starting block is:

(i) Used in a controlled environment such as a swimming competition under the supervision of an instructor; and

(ii) Restricted from unsupervised use or is removed when not under supervised use.¹

Equipment Rooms.

A. For a Category A aquatic venue, an owner shall ensure that an aquatic venue has an equipment room that complies with Chapter 4.9 of the Model Aquatic Health Code;

B. For a Category B aquatic venue, an owner shall ensure that an aquatic venue has an equipment room that:

(1) Except when the manufacturer requires a piece of equipment to be outside the equipment room for proper operation, houses the aquatic venue circulation, filtration, and disinfection equipment; and

(2) Has:

(a) Weather tight construction to prevent the entrance of precipitation;

(b) Adequate floor area for safe access to all equipment;

(c) A minimum ceiling height of 7 feet 6 inches;

(d) A floor:

(i) Constructed of concrete or other suitable material having a smooth slip resistant finish and a positive drainage, including a sump drain pump if necessary; and

(ii) Sloped toward the floor drain or a sump drain pump adequate to prevent standing water at all times;

(e) An entrance door that:

(i) Allows complete and unencumbered access to the equipment room;

(ii) Is equipped with an automatic closer;

(iii) Is equipped with an automatic lock; and

(iv) Is equipped with a lock that requires a key or combination to open from the outside;

(v) Is installed and maintained to ensure that the door closes completely and latches without human assistance;

(vi) Is designed and installed to be opened by one hand from the inside of the room under all circumstances, without the use of a key or tool; and

(vii) Opens out;

(f) A minimum of 20 lumens of artificial illumination per square foot of floor space within the equipment room;

(g) Continuous mechanical exhaust ventilation sized at 2 cubic feet per minute per square foot of floor area;

(h) An exhaust vent intake placed at a height less than or equal to 3 feet from the floor of the equipment room, discharged to limit exposure to the public;

(i) Adequate make-up air to replace the air exhausted by the ventilation system;

(j) A hose bibb with an atmospheric vacuum breaker or a hose bibb with an atmospheric vacuum breaker that is accessible within 50 feet of the equipment room so that a hose can service the entire equipment room; and

(k) A water-resistant data sheet that is posted in a conspicuous place for each aquatic venue and includes the following information:

(i) Volume of water in the pool, spa, or surge tank of a spray ground;

(ii) Minimum turnover rate in gpm;

(iii) Maximum filter capacity in gpm;

(iv) Water surface or splash zone area in square feet;

(v) Except for a spray ground, the length of water perimeter in feet;

(vi) Maximum user load;

(vii) Operating instructions for valves and equipment; and

(viii) For aquatic venues that use salt chlorine generators, the total dissolved solids level in ppm once the minimum amount of salt is added to an aquatic venue.

.28 [Suction Entrapment Prevention.

To prevent a suction entrapment hazard, an owner shall ensure that:

A. A vacuum fitting is capped when not in use;

B. A vacuum line valve is in the closed position when not in use;

C. Except as provided in §§F and G of this regulation, the main drain for a public pool or spa complies with 15 U.S.C. §8003 and is:

(1) Connected to a minimum of two main drain outlets that are:

(a) Not isolated by a valve or other means;

(b) Spaced at least 3 feet from edge to edge; and

(c) Hydraulically balanced; or

(2) An unblockable drain.

D. A drain is covered with a securely attached drain cover in compliance with the:

(2) American National Standard for Public Swimming Pools; and

(2) 15 U.S.C. §8003.

E. A skimmer is:

(1) Connected to an equalization line, main drain line, vent, or another skimmer that cannot be isolated by a valve or other means, or

(2) Provided with a vented lid;

F. A pool or spa constructed before February 10, 1997 is provided by June 1, 2002, with:

(1) At least two hydraulically balanced drain outlets spaced a minimum of 3 feet from edge to edge that cannot be isolated to create a single outlet for each circulation pump, as illustrated in Regulation .28-1A of this chapter;

(2) A channel drain system that is at least 3 feet from edge to edge, as illustrated in Regulation .28-1B of this chapter; or

(3) An approved safety vacuum release system.

G. As an interim measure, until a pool or spa constructed before February 10, 1997 is in compliance with §F of this regulation:

(1) A pool or spa has a minimum of two outlets that cannot be isolated to create a single outlet per pump; and

(2) These outlets are provided by connecting the main drain line to a skimmer line so that the lines cannot be isolated to create a single outlet, as illustrated in Regulation .28-1C of this chapter, assuring that:

(a) The skimmer line does not become blocked within the skimmer housing at any time;

(b) Associated valves are locked in an open position to prevent the drain or the skimmer from becoming a single source of suction; and

(c) Associated valves are permanently tagged with a warning to maintain the valves in the open position at all times when the pool or spa is in use;

H. A pool or spa is in compliance with the following:

(1) A suction outlet is provided with a cover that complies with the American National Standard for Public Swimming Pools;

(2) A suction fitting complies with 15 U.S.C. §8003;

(3) Suction outlet covers are in good condition, with no breaks, cracks, or other defects that could affect the structural integrity of the cover;

(4) Suction outlet covers are secured according to manufacturers' directions and in such a way that the covers cannot be removed without the use of tools;

(5) A pool or spa that does not have suction outlets in compliance with this regulation has all pumps immediately shut off until the pool or spa has been brought into compliance with this regulation;

(6) The maximum velocity in the design of the drain piping does not exceed 6 feet per second when 100 percent of the circulation system design flow is drawn through the drain piping of any single drain;

(7) A pool or spa facility has a comprehensive written maintenance program that addresses the following:

(a) If a suction outlet cover is cracked or broken, the pump shall be immediately shut off and the cover shall be replaced;

(b) Covers shall be anchored in accordance with the manufacturer's specifications and supplied parts, and only manufacturer specified, noncorrosive fasteners may be used;

(c) Lines and equipment shall be labeled or color coded for ready identification; and

(d) The on/off switch for circulation pumps shall be clearly identified and labeled; and

(8) Check valves in the suction line to pumps are removed to allow backflow of water or air to release the suction when the pump is shut off or when an influent blockage detection device is activated; and

I. A pool and spa operator completes the Pool and Spa Entrapment Hazards Checklist provided by the Secretary, or an equivalent form, on a daily basis before the pool or spa is open for that day's use.¹

Pipe Material and Identification.

An owner shall ensure that:

A. Pipe material for an aquatic venue conforms to COMAR 09.20.01;

B. Identification is provided according to the Model Aquatic Health Code;

C. All piping is marked with directional arrows to indicate flow direction during filtration according to the Model Aquatic Health Code; and

D. All valves are:

(1) Clearly identified according to the Model Aquatic Health Code; and

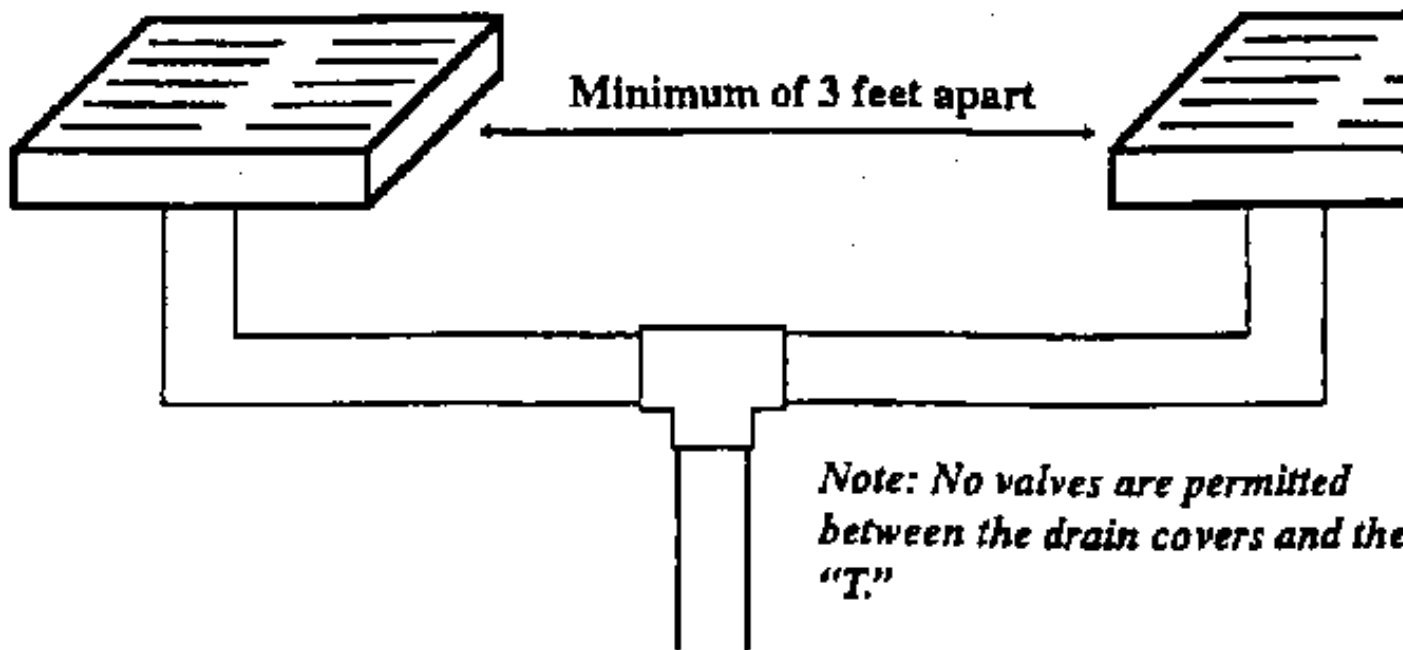
(2) Described as to their function in an operating instruction manual kept in the equipment room.

I.28-1 Drain System Figures.

A. Dual Drain System.

.28-1 Drain System Figures.

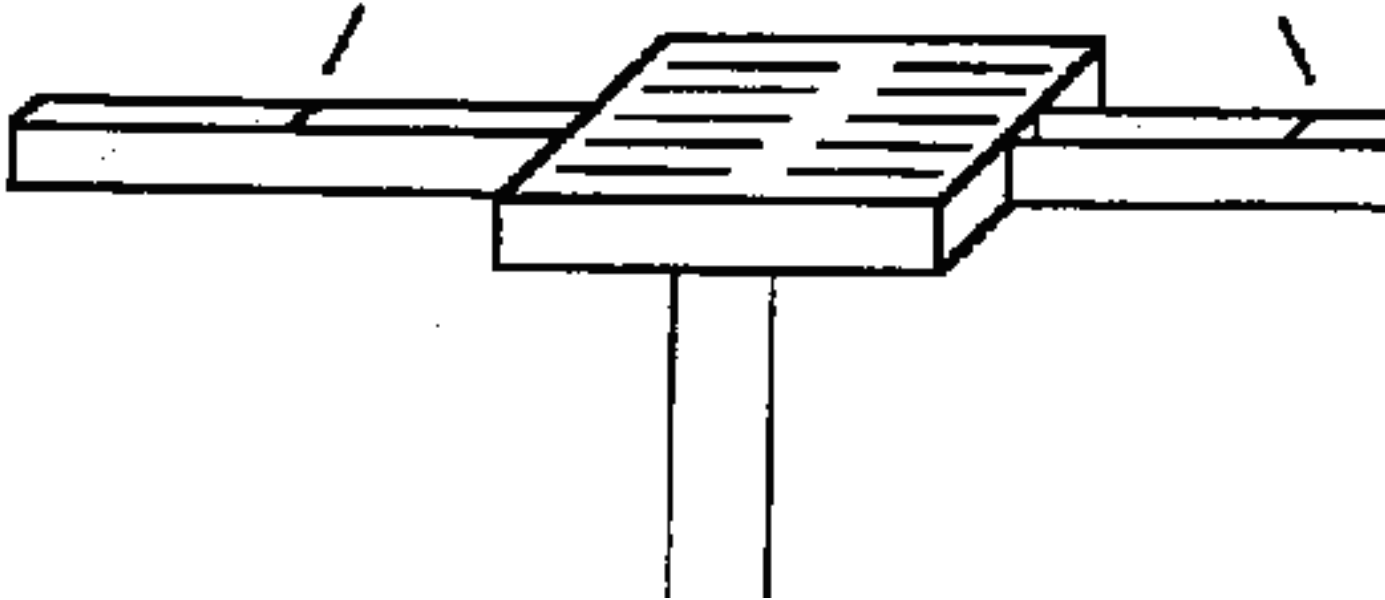
A. Dual Drain System.



B. Channel Drain System.

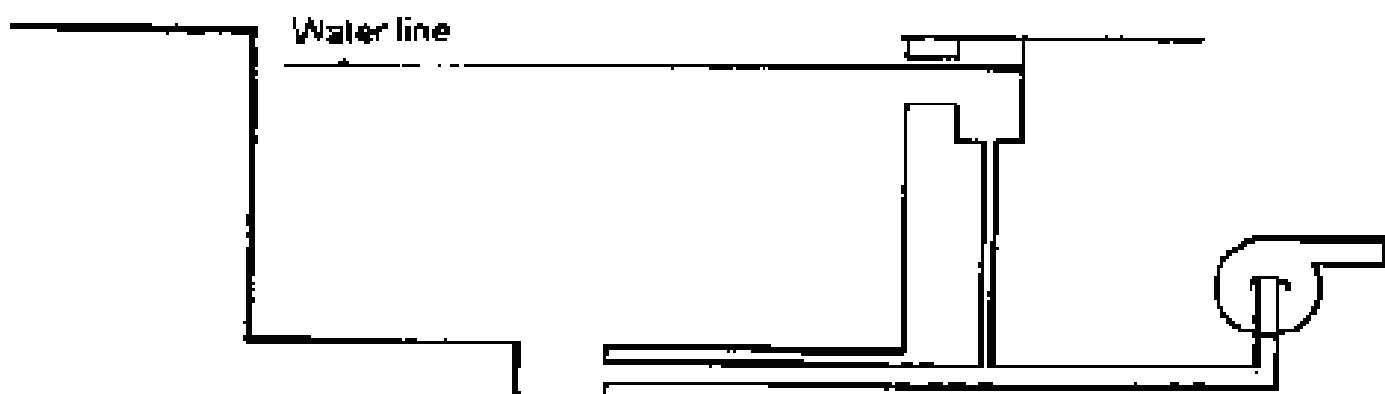
B. Channel Drain System.

Grate type cover would be attached to the channel



C. Main Drain and Skimmer Line System.

C. Main Drain and Skimmer Line System.



1

.29 [Chemical Storage Area.

An owner shall ensure that a recreational pool, semipublic pool, or public spa has a chemical storage area that:

A. Is protected against the weather, excess heat, and moisture; and

B. Has:

(1) A lockable door which can be opened from the inside,

(2) Ventilation that is sized at 2 cfm per square foot of floor area and that exhausts to the open air,

(3) A minimum of 20 footcandles of illumination, and

(4) Storage for chemicals in accordance with the material safety data sheet for a particular chemical. **1**

Circulation Systems.

A. Gauges and Release Valves.

(1) For a Category A aquatic venue, an owner shall ensure that the circulation system for an aquatic venue complies with the Model Aquatic Health Code; and

(2) For a Category B aquatic venue, an owner shall ensure that the circulation system for an aquatic venue includes the following, a:

(a) Pressure gauge on each filter or on the influent side of the filter piping;

(b) Pressure gauge on the effluent side of the filter piping;

(c) Vacuum or compound gauge on the influent side of a pump;

(d) Flow meter that:

(i) Indicates the rate of flow through the circulation system;

(ii) Has a permanent scale readable in gpm;

(iii) Is accurate to within 10 percent of the actual flow; and

(iv) Reads in the range encompassing the minimum and maximum flow rate;

(e) Thermometer on the return line to an aquatic venue if the circulation system includes a heating system; and

(f) Manually operated air release valve on a pressure filter or a separation tank, or both.

B. Turnover Rate.

(1) For a Category A aquatic venue, an owner shall ensure that an aquatic venue is constructed to produce a minimum turnover rate compliant with the Model Aquatic Health Code.

(2) For a Category B aquatic venue, an owner shall ensure that an aquatic venue is constructed to produce a minimum turnover rate (volume of the aquatic venue divided by maximum turnover time (t)), with continuous 24 hour flow using the values for (t) provided in the following table:

<u>Type of Aquatic Venue</u>	<u>Maximum Turnover Time (t)</u>
<u>Any Aquatic Venue Not Specifically Listed</u>	<u>480 minutes</u>
<u>Limited Public-Use Pool</u>	<u>720 minutes</u>
<u>Spa</u>	<u>30 minutes</u>
<u>Spray Ground</u>	<u>120 minutes</u>
<u>Therapy Pool</u>	<u>360 minutes</u>
<u>Wading Pool</u>	<u>120 minutes</u>
<u>Water Recreational Attraction</u>	<u>360 minutes</u>

C. Head Loss Calculations. An owner of an aquatic venue shall ensure that head loss calculations include the following:

(1) Piping head loss, found by using:

(a) The Hazen-Williams formula which is: piping head loss per 100 feet of pipe = $0.2083 (100 / C)^{1.852} (Q^{1.852} / D^{4.865})$

where: D = nominal inside diameter of pipe;

Q = gpm;

C = constant for inside roughness of pipe; or

(b) Standard engineering tables;

(2) Equipment head loss, including filters, valves, heaters, and other circulation equipment, based on the manufacturers' specifications for the equipment at the design flow rate, and filter pressure differential with the filter in a clean and in a dirty condition;

(3) Elevation of pump suction and discharge in relation to the aquatic venue water surface level or the surge tank; and

(4) Determination of the total dynamic head of the circulation system for use in pump selection.

D. Surface to Bottom Flow Ratio and Water Circulation.

(1) An owner of an aquatic venue constructed with:

(a) Both surface and bottom outlets shall ensure that piping for:

(i) Surface outlets is designed to accommodate 80 percent of the maximum flow; and

(ii) Bottom outlets is designed to accommodate 20 percent of the maximum flow;

(b) A gutter surface overflow system shall ensure that piping for:

(i) Surface outlets is designed to accommodate 50 percent of the maximum flow; and

(ii) Bottom outlets is designed to accommodate 50 percent of the maximum flow; and

(c) Only surface outlets shall ensure that:

(i) Where the width of the aquatic venue exceeds 30 feet, return inlets are installed on both the wall and floor of the aquatic venue; and

(ii) The circulation system is capable of meeting the required maximum turnover time in §B of this regulation.

(2) An owner of a public spray ground shall ensure that piping for outlets is designed to accommodate 100 percent of the maximum flow.

E. Filter Capacity. An owner of an aquatic venue shall ensure that a filter:

(1) Operates within the filter design flow rate; and

(2) Has a filtration capacity sufficient to operate in the range between the minimum turnover rate and the filter design flow rate when the circulation system is at the:

(a) Lowest level of calculated total dynamic head when the filter is in a clean condition; and

(b) Highest level of calculated total dynamic head when the filter pressure differential is at the maximum allowed in Regulation .47E of this chapter.

F. Interconnections Between Aquatic Venues. An owner of an aquatic venue shall ensure that a pool is not interconnected with a:

(1) Spa or wading pool except during the filling of a spa or wading pool; or

(2) Spray ground.

.30 Hydrostatic Relief Valves.

An owner shall ensure that an in-ground recreational pool, semipublic pool, or public spa has hydrostatic relief valves as needed to relieve the hydrostatic pressure from ground water when the pool or spa is empty.**1**

Circulation System Components.

A. Except as provided in §§B and H(1) of this regulation, an owner of an aquatic venue shall ensure that circulation system components, including skimmers, pumps, filters, multiport valves, adjustable output rate chemical feeders, flow-through chemical feeders, chemical process equipment, chlorine generators, ion generators, and other aquatic venue equipment comply with Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities.

B. The Secretary shall accept aquatic venue circulation system components as meeting the requirements set forth in §A of this regulation if these items are in:

(1) The current, published NSF listing of swimming pool, spa, or hot tub circulation system components; or

(2) A listing from an organization accredited by the American National Standards Institute (ANSI) for the certification of circulation system components.

C. Chlorine Gas Feeders. An owner of an aquatic venue shall not allow the use of chlorine gas feeders as a means of disinfecting an aquatic venue.

D. Chemical Feeder and Process Equipment.

(1) For a Category A aquatic venue, an owner shall ensure that:

(a) Except for combined chlorine, recirculation and water treatment complies with the Model Aquatic Health Code;

(b) The capacity of chemical feeder and process equipment is adequate to establish breakpoint chlorination;

(c) If combined chlorine is between 0.5 ppm and 1 ppm:

(i) A sign is posted at the entrance to the aquatic venue notifying patrons that the combined chlorine level is between 0.5 ppm and 1 ppm and that individuals with respiratory conditions which may be exacerbated by these levels should limit use of the aquatic venue; and

(ii) For a guarded aquatic venue, guard exposure to the aquatic venue with combined chlorine levels between 0.5 ppm and 1 ppm is limited to 30 minutes per hour; and

(d) If combined chlorine is at or above 1 ppm the aquatic venue is closed, superchlorinated to reach breakpoint, and the combined chlorine level is brought below 1 ppm prior to reopening.

(2) For a Category B aquatic venue, an owner shall ensure that:

(a) The capacity of chemical feeder and process equipment is adequate to:

(i) Provide the minimum required disinfectant residual to the aquatic venue water, as required by Regulation .48A of this chapter; and

(ii) Establish breakpoint chlorination; and

(b) If combined chlorine is between 0.5 ppm and 1 ppm:

(i) A sign is posted at the entrance to the aquatic venue notifying patrons that the combined chlorine level is between 0.5 ppm and 1 ppm and that individuals with respiratory conditions which may be exacerbated by these levels should limit use of the aquatic venue; and

(ii) For a guarded aquatic venue, guard exposure to the aquatic venue with combined chlorine levels between 0.5 ppm and 1 ppm is limited to 30 minutes per hour; and

(c) If combined chlorine is at or above 1 ppm the aquatic venue is closed, superchlorinated to reach breakpoint, and the combined chlorine level is brought below 1 ppm prior to reopening.

E. Aquatic Facility Cleaning.

(1) For a Category A aquatic venue, an owner shall ensure that the aquatic venue is in compliance with Chapter 5.6.10.6 of the Model Aquatic Health Code.

(2) For a Category B aquatic venue, an owner shall ensure that:

(a) The aquatic venue has a vacuum system for cleaning the aquatic venue floor;

(b) A vacuum system is provided that is separate from the skimmer or gutter system for a circulation system with more than four skimmers;

(c) When a vacuum fitting is provided within an aquatic venue, the fitting is:

(i) Located at a convenient location, approximately 1 foot below the water surface; and

(ii) Provided with a flush removable cap or a spring loaded safety cover either of which shall be in place at all times except when in use; and

(d) The vacuum line connection is before the pump hair and lint strainer when the vacuum system is an integral part of the circulation system.

(3) For a Category B aquatic venue, an owner may use skimmer outlet pipes for vacuum purposes for a circulation system with four or fewer skimmers.

F. Carbon Dioxide Feeders.

(1) For a Category A aquatic venue, an owner shall ensure that a carbon dioxide feeder system is in compliance with the Model Aquatic Health Code; and

(2) For a Category B aquatic venue, an owner shall ensure that a carbon dioxide feeder system is:

(a) Installed and maintained in accordance with the manufacturer's specifications;

(b) Located in a chemical storage area that meets the requirements provided in Regulation .33 of this chapter; and

(c) Secured to prevent damage to the gas cylinder if the cylinder is subject to tipping.

G. Ozone Systems.

(1) For a Category A aquatic venue, an owner shall ensure that an ozone system is installed in compliance with the Model Aquatic Health code.

(2) For a Category B aquatic venue, an owner shall ensure that:

(a) An ultraviolet light ozone system is used and installed according to Circulation System Components and Related Materials for Pools, Spas/Hot Tubs;

(b) A corona discharge ozone system is used and installed according to Circulation System Components and Related Materials for Pools, Spas/Hot Tubs, and the following requirements:

(i) The system is designed to provide a minimum concentration of ozone generated to be 1.5 percent by weight;

(ii) The ozone gas is diffused through a static mixer into a contact column with a side-stream flow of recirculated water equal to a minimum of 5 percent of the required turnover rate;

(iii) The system is designed to provide a contact time of 2 minutes when used in conjunction with a chlorine disinfectant or 1 minute when used in conjunction with a bromine disinfectant;

(iv) The system provides a minimum contact time value of 0.5 milligram/liter in the contact column when the contact time value equals the concentration of dissolved ozone in milligrams/liter times the contact time in minutes;

(v) The air feed, which is natural or oxygen enriched air, is filtered to remove particulates and dehumidified to a minimum dew point of minus 60°C before the ozone generating chamber;

(vi) An ozone gas feed line is ozone resistant;

- (vii) Valves are provided to control flow through the system;
- (viii) Off-gas venting from the contact column is:
- (ix) Equipped with an ozone destruct system that removes all ozone before release to the atmosphere; or
- (x) Returned to the main recirculation line when used in conjunction with a bromine disinfectant;
- (xi) When necessary, a foam suppression system is provided before offgas venting;
- (xii) The oxidation reduction potential of the sidestream after contact and before dissolved ozone removal is a minimum of 650 millivolts;
- (xiii) The dissolved ozone is removed from the sidestream using granulated activated carbon before remixing with the recirculated water when used in conjunction with a chlorine disinfectant;
- (xiv) The ozone generating system shuts off if the water recirculating system shuts off or if the vacuum is lost on the ozone gas output line;
- (xv) The ozone gas output is under negative pressure or a vacuum;
- (xvi) The ozone generation area is ventilated at 2 cfm per square foot of floor area to prevent the buildup of excess ozone; and
- (xvii) The recirculated water is treated to maintain the pH between 7.2 and 7.8.

H. Skimmers.

- (1) The Secretary shall accept skimmers on an aquatic venue as meeting the requirements set forth in §A of this regulation and not require the installation of equalizer lines or equalizer line covers if:
- (a) The skimmer is connected to another skimmer or main drain line that cannot be isolated by a valve or other means;
- (b) The skimmer is provided with a vented lid;
- (c) Except for an equalizer line, the skimmer is in compliance with Equipment for Swimming Pools, Spas, Hot Tubs and Other Recreational Water Facilities;

(d) The flow rate through the skimmer is not less than 14 gpm or greater than 35 gpm; and

(e) The skimmer is provided with a means for adjusting the flow rate; and

(2) The owner shall ensure that:

(a) One skimmer is provided per:

(i) 50 feet of aquatic venue perimeter; or

(ii) 500 square feet of aquatic venue water surface area or fraction thereof, whichever is greater;

(b) A minimum of two skimmers are installed; and

(c) The skimmers are spaced to provide maximum skimming action of the water surface.

I. For a:

(1) Category A aquatic venue, an owner shall ensure that all chemical feeders are in compliance with the Model Aquatic Health Code; and

(2) Category B aquatic venue, an owner shall ensure that all chemical feeders that operate independently of the circulation pump are provided with:

(a) An automatic means to be disabled through an electrical interlock with at least one of the following:

(i) Recirculation pump power;

(ii) Flow meter, flow switch, or pressure switch meeting the requirements of §A of this regulation in the return line;

(iii) Chemical control power and paddle wheel or flow cell on the chemical controller if safety test confirms feed systems are disabled through the controller when the pump is turned off, loses prime, or filters are backwashed; or

(b) A visible and audible alarm located so as to be visible by an on-duty lifeguard or attendant which, when activated, will immediately cause the operator to close the aquatic venue until such time that the problem is corrected and if applicable, the corrective action is verified by the Secretary.

.31 Filter Backwash Water and Deck Drainage Disposal.

A. An owner shall ensure that:

(1) The disposal of filter backwash water and pool or spa wastewater conforms with:

(a) COMAR 09.20.01,

(b) Local sanitary code requirements, and

(c) Discharge requirements of COMAR 26.08.01 ----- 26.08.04; and

(2) Deck drainage disposal conforms with:

(a) COMAR 09.20.01, and

(b) Local plumbing code requirements.

B. An owner may not return filter backwash water or other wastewater to a pool or spa, except for filter backwash water that has been filtered to remove particulates and treated to eliminate coliform bacteria and waterborne pathogens.¹

Diving Area and Equipment.

A. For a Category A aquatic venue, an owner shall ensure that the diving area and equipment are compliant with the Model Aquatic Health Code; and

B. For a Category B aquatic venue, an owner shall ensure that:

(1) The dimensions of aquatic venue diving area are in conformance with §§6.5—6.6.2 of the American National Standard for Public Swimming Pools;

(2) Diving equipment is installed in compliance with §§7.2.5—7.2.5.7 of the American National Standards for Public Swimming Pools;

(3) Unobstructed clearance is provided for a diving board in conformance with the following minimum dimensions:

(a) A minimum height in conformance with §7.2.3 of the American National Standard for Public Swimming Pools;

(b) A clearance as required by §C(1) of this regulation extending:

- (i) 16 feet forward of the plummet;
- (ii) 8 feet behind the plummet; and
- (iii) 8 feet to both sides of the plummet;
- (b) A minimum distance of 10 feet between the plummets of adjacent diving boards; and
- (c) A minimum distance between a diving board plummet and a side wall of:
 - (i) 10 feet for a diving board 1 meter or less above the water line; and
 - (ii) 12 feet for a diving board greater than 1 meter above the water line;
- (4) Diving boards in excess of 10 feet above the water line and diving platforms are in compliance with §7.2.4 of the American National Standard for Public Swimming Pools; and
- (5) A starting block:
 - (a) Is located on the pool deck so that a swimmer dives into a minimum of 5 feet water depth; or
 - (b) At a pool constructed before February 10, 1997, is located so that a swimmer dives into a minimum of:
 - (i) 5 feet water depth when the starting block is used without supervision; or
 - (ii) 4 feet water depth when the starting block is used in a controlled environment such as a swimming competition under the supervision of an instructor and restricted from unsupervised use or is removed when not under supervised use.

.32 Illumination of Water, Deck, and Walkway.

An owner shall ensure that an indoor recreational pool, semipublic pool, or public spa, or one used during nighttime, is provided with:

A. Even illumination of the water, deck, and walkways;

B. Illumination of the water and deck that is:

(1) A combination of underwater lighting and deck lighting so that the:

- (a) Underwater lighting yields at least 0.5 watt per square foot of water surface area, and
- (b) Deck lighting yields at least 0.6 watt per square foot of required deck area or at least 15 footcandles; or
- (2) Overhead lighting yielding at least 2 watts per square foot of required deck area or at least 20 footcandles of light that is directed onto the deck and the water surface so that the entire pool or spa bottom is clearly visible;
- C. Lighting that minimizes reflection from the water surface so that the visibility of the pool or spa bottom is not obscured; and
- D. Walkway lighting yielding at least 15 footcandles of light.¹

Entrapment Prevention.

To prevent an entrapment hazard, an owner shall ensure that:

A. A vacuum line is equipped with an independent valve and the valve is in the closed position when not in use;

B. Except as provided in §§B(2) and E of this regulation, the main drain for an aquatic venue:

(1) Complies with 15 U.S.C. §8003 and is:

(a) Connected to a minimum of two main drain outlets that are:

(i) Not isolated by a valve or other means;

(ii) Spaced at least 3 feet apart measured from center to center of sump or located on two different planes; and

(iii) Hydraulically balanced; or

(b) An unblockable drain; and

(2) Within the splash zone of a public spray ground complies with 15 U.S.C. §8003;

C. A drain is covered with a secured drain cover that is attached according to the manufacturer's instructions and is in compliance with the:

(1) American National Standard for Public Swimming Pools; and

(2) 15 U.S.C. §8003;

D. A skimmer complies with Regulation .30A of this chapter;

E. A public pool or spa constructed before February 10, 1997 is provided with:

(1) At least two hydraulically balanced drain outlets in compliance with §B(1) of this regulation;

(2) An unblockable drain system that complies with §B(1) of this regulation;
or

(3) An approved safety vacuum release system;

F. An owner shall ensure that a submerged suction outlet:

(1) Is provided with a cover that complies with the American National Standard for Public Swimming Pools;

(2) Complies with 15 U.S.C. §8003;

(3) Cover is in good condition, with no breaks, cracks, or other defects that could affect the structural integrity of the cover; and

(4) Cover is secured according to manufacturer's directions and in such a way that the cover cannot be removed without the use of a tool;

G. An owner shall ensure that:

(1) When an aquatic venue has a submerged suction outlet that is not in compliance with this regulation, all pumps are immediately shut off and the aquatic venue is closed until brought into compliance with this regulation;

(2) Except as provided in §G(4), the maximum velocity in the design of the drain piping does not exceed 6 feet per second when 20 percent of the circulation system maximum flow is drawn through the drain piping of any single drain;

(3) The maximum velocity in the design of the skimmer piping does not exceed 6 feet per second when 80 percent of the circulation system maximum flow is drawn through the skimmer piping;

(4) For an aquatic venue utilizing a gutter system, the maximum velocity in the design of the drain piping does not exceed 6 feet per second when 50

percent of the circulation system maximum flow is drawn through the drain piping of any single drain;

(5) A comprehensive written maintenance program is prepared and implemented that includes procedures for the qualified operator to:

(a) Keep the written maintenance program on file with the operating records at the aquatic venue;

(b) Make the written maintenance program available to the Department for inspection;

(c) Shut off the pump and close the aquatic venue if the qualified operator discover a suction outlet cover that is cracked, broken or otherwise not in compliance with §F(3) of this regulation;

(d) Replace a suction outlet cover that is cracked, broken or otherwise not in compliance with §F(3) of this regulation;

(e) Close the aquatic venue if the circulation pump is off for longer than 15 minutes; and

(f) Prevent the use of the aquatic venue when the circulation pump is found to be off prior to opening the aquatic venue until the circulation pump is operating and the operator has verified that the water chemistry within the aquatic venue is in compliance with Regulations .48 and .49 of this Chapter;

(6) A check valve in the suction line to a pump is removed to allow backflow of water or air to release the suction when the pump is shut off or when an influent blockage detection device is activated; and

(7) For a Category A aquatic venue, entrapment prevention complies with the Model Aquatic Health Code.

.33 Ventilation of an Indoor Recreational Pool, Semipublic Pool, or Public Spa.

An owner shall ensure that an indoor recreational pool, semipublic pool, or public spa has:

A. A ventilating system capable of:

(1) Exhausting 1 1/2 cfm of air per square foot of enclosed area, or

(2) Dehumidifying the recirculated air from the enclosed area; and

B. Make-up air equal to the volume of exhausted air or as required in the ventilation system specifications.¹

Chemical Storage Area.

A. For a Category A aquatic venue, an owner shall ensure that a chemical storage area is provided that complies with the requirements of the Model Aquatic Health Code;

B. For a Category B aquatic venue, an owner shall ensure that a chemical storage area is provided that is:

(1) Protected against the weather, excess heat, and moisture;

(2) Equipped with:

(a) An emergency eyewash station that complies with Regulation .60 of this chapter;

(b) A floor or deck that is protected against substantial chemical damage by the application of a coating or sealant capable of resisting attack by the chemicals to be stored; and

(c) Corrosion-resistant permanent signage that includes:

(i) A warning sign against unauthorized entry;

(ii) A sign specifying the expected hazards;

(iii) A sign specifying the location of the associated Safety Data Sheets; and

(iv) A product chemical hazard National Fire Protection Association chart;

(3) Constructed and operated to minimize the transfer of chemical fumes into any interior space of a building intended for occupation; and

(4) A minimum of 20 lumens of illumination per square foot of floor space within the chemical storage area;

C. For a Category B aquatic venue where the chemical storage area is indoors, an owner shall ensure that the chemical storage area has:

(1) Walls, floors, doors, ceilings, and other building surfaces joined to each other tightly;

(1) Doors that:

(a) Allow complete and unencumbered access to the chemical storage area;

(ib) Are constructed of corrosion-resistant materials;

(c) Are equipped with corrosion-resistant:

(i) Permanent signage compliant with §A(2)(c) of this regulation;

(ii) Automatic locks that require a key or combination to open from the outside; and

(iii) Hinges, tracks, or other supports;

(d) Are installed and maintained to ensure that the doors close completely and latch without human assistance; and

(e) Are designed and installed to be opened by one hand from the inside of the room under all circumstances, without the use of a key or tool;

(3) A dedicated, continuous mechanical exhaust ventilation system sized at 2 cubic feet per minute per square foot of floor area; and

(4) Chemicals stored in accordance with the safety data sheet for the particular chemical;

D. For a Category B aquatic venue where the chemical storage area is outdoors, an owner shall ensure that the chemical storage area:

(1) Has:

(a) Natural ventilation;

(b) A barrier that is at least 6 feet high and complies with Regulation .23;

(c) A self-closing and self-latching gate;

(d) A permanent locking device on the gate; and

(e) A floor or deck that is:

(i) Protected against substantial chemical damage; and

(ii) Prevents ground contamination from spills; and

(2) Is:

(a) Secured at all times to prevent unauthorized access; and

(b) Designed to:

(i) Protect the stored chemicals from tampering, wild fires, unintended exposure to water as well as other foreseeable hazards; and

(ii) Prevent the transfer of chemical fumes into any interior space of a building intended for occupation.

.34 [Plumbing.

A. Water Supply System. An owner shall ensure that a water supply system at a public pool or spa is in conformance with:

(1) COMAR 26.04.01, 26.04.03, and 26.04.04;

(2) COMAR 09.20.01; and

(3) Local plumbing code requirements.

B. Sewage Disposal System. An owner shall ensure that a sewage disposal system at a public pool or spa is in conformance with:

(1) COMAR 26.04.02 and 26.04.03;

(2) COMAR 09.20.01; and

(3) Local plumbing code requirements.

C. Drinking Fountains. An owner shall ensure that a recreational pool, semipublic pool, or public spa enclosure has at least one drinking fountain for every 5,000 square feet of water surface area.

D. Hose Bibbs. An owner of a recreational pool, semipublic pool, or public spa shall ensure that the following locations have an accessible hose bibb equipped with an atmospheric vacuum breaker:

(1) On the deck at 150 feet intervals;

- (2) In an equipment room; and
- (3) In both a men's and a women's bathhouse.

E. Fill Spouts. If a fill spout is installed at a public pool or spa, the owner shall ensure that the fill spout is:

- (1) Installed within 10 inches of a ladder or handrail or in front of a lifeguard stand whose supports are immediately adjacent to the pool or spa rim, so that the fill spout does not present a tripping hazard or a puncture hazard;
- (2) Not installed over a seat bench;
- (3) Braced or constructed so the fill spout does not flex downward; and
- (4) Provided with a flexible cover on the tip of the fill spout if the spout presents a potential for injury to an individual using a pool or spa.

F. Backflow Prevention. An owner of a public pool or spa shall ensure that:

- (1) A pool or spa facility has backflow protection for:
 - (a) A potable water supply, in conformance with COMAR 09.20.01, and
 - (b) Wastewater, in conformance with COMAR 09.20.01; and
- (2) An air gap that is two times the diameter of the fill spout separates the fill spout from the flood rim level of the pool or spa.

G. Source of Water. An owner of a public pool or spa shall ensure that:

- (1) When a public pool or spa is filled with water from a nonpotable source, such as a water tank holding nonpotable water or surface water, the:
 - (a) Water is filtered, treated, and disinfected after addition to the pool or spa to meet the requirements of Regulation .44 of this chapter, and
 - (b) Pool or spa is not used until a bacteriological sample taken by the Secretary indicates that there are no coliform organisms in the water; and
- (2) Public pool or spa make-up water:
 - (a) Is from a potable source, and

(b) Having an iron level over 0.3 ppm is treated to lower the iron level to 0.3 ppm or less before the make-up water is added to a pool or a spa.¹

Hydrostatic Relief Valves.

A. For a Category A aquatic venue, an owner shall ensure that an in-ground aquatic venue has hydrostatic relief valves that comply with the Model Aquatic Health Code; and

B. For a Category B aquatic venue, an owner shall ensure that an in-ground aquatic venue has hydrostatic relief valves as needed to relieve the hydrostatic pressure from ground water when the aquatic venue is empty.

.35 [Toilet, Hand Sink, and Shower Facilities.

A. Except as provided in §B of this regulation, an owner shall ensure that a recreational pool, semipublic pool, or public spa has:

(1) A bathhouse, toilets, hand sinks, and showers within 100 feet of an entrance gate to the pool or spa in accordance with the American National Standard for Public Swimming Pools, Articles 19.1—19.6.13;

(2) At least a minimum number of toilets, hand sinks, and showers based on:

(a) The maximum user load of the pool or spa set forth in Regulation .19 of this chapter;

(b) Fixture ratios set forth in §A(1) of this regulation; and

(c) State and local building codes;

(3) 50 percent of the required fixtures designated for use by each sex, unless the pool or spa is for one sex only; and

(4) At least 50 percent of the required showers located within a bathhouse.

B. An owner is not required to provide toilet, hand sink, and shower facilities at a recreational pool, semipublic pool, or public spa when bathers have access to equivalent facilities in:

(1) Living quarters not more than 500 feet from a pool or a spa entrance; or

(2) A building or buildings not more than 500 feet from a pool or a spa entrance.

C. An owner shall ensure that equivalent facilities used by recreational pool, semipublic pool, or public spa bathers and patrons of a recreational center, health club, marina, or other facility are in compliance with:

(1) Section A of this regulation; and

(2) State or local plumbing codes regarding fixtures and dressing area for the patrons sharing the equivalent facilities.¹

Filter Backwash Water and Deck Drainage Disposal.

A. For a Category A aquatic venue, an owner shall ensure that:

(1) The disposal of filter backwash water, aquatic facility and venue wastewater, and deck drainage disposal conforms with:

(a) The Model Aquatic Health Code;

(b) COMAR 09.20.01;

(b) Local sanitary and plumbing code requirements; and

(c) Discharge requirements of COMAR 26.08.01—26.08.04.

B. For a Category B aquatic venue, an owner shall ensure that:

(1) The disposal of filter backwash water, aquatic facility and venue wastewater, and deck drainage disposal conforms with:

(a) COMAR 09.20.01;

(b) Local sanitary and plumbing code requirements; and

(c) Discharge requirements of COMAR 26.08.01—26.08.04.

C. Except for water that is filtered to remove particulates and treated to eliminate coliform bacteria and waterborne pathogens, an owner shall not return filter backwash water or other wastewater to an aquatic venue.

.36 ¹Antiscald Protection for Showers.

An owner of a recreational pool, semipublic pool, or public spa shall ensure that each shower has an approved pressure-balanced, antiscald device that limits the delivered water temperature to below 115°F.¹

Illumination of Water, Deck, and Walkway.

A. For a Category A aquatic venue, an owner shall ensure that the illumination of the water, decks and walkways complies with the Model Aquatic Health Code.

B. For a Category B aquatic venue, an owner shall ensure that an indoor aquatic venue or one used before sunrise or after sunset, is provided with:

(1) Even illumination of the water, deck, and walkways;

(2) Illumination of the water and deck of an aquatic venue that is:

(a) A combination of underwater lighting and deck lighting so that the:

(i) Underwater lighting provides at least 8 lumens per square foot of water surface area; and

(ii) Lighting for the required deck area provides at least 10 lumens per square foot of required deck area; or

(2) Lighting for the required deck area provides at least 20 lumens per square foot of required deck area that is directed onto the deck and the water surface so that the bottom of the entire aquatic venue is clearly visible;

(3) Lighting that minimizes reflection from the water surface so that the entire bottom of an aquatic facility is clearly visible;

(4) Walkway lighting yielding at least 10 lumens per square foot of the walkway; and

(5) Illumination of the splash zone and deck that provides at least 10 lumens per square foot of the splash zone and deck.

.37 [Accommodations for Disabled Individuals.

An owner shall ensure that a public pool or spa is in compliance with all applicable federal, State, and local codes governing facilities for disabled individuals, including COMAR 05.02.02.**1**

Ventilation of an Indoor Aquatic Venue.

A. For a Category A aquatic venue, an owner shall ensure that an indoor aquatic venue has a ventilation system that is compliant with the Model Aquatic Health Code.

B. For a Category B aquatic venue, an owner shall ensure that an indoor aquatic venue has:

(1) A ventilation system capable of:

(a) Exhausting 1 1/2 cfm of air per square foot of enclosed area; and

(b) Dehumidifying the recirculated air from the enclosed area; and

(2) Make-up air equal to the volume of exhausted air or as required by the ventilation system specifications, has a ventilation system equipped with.

.38 [Equipment Installation and Operating Instructions.

An owner of a public pool or spa shall ensure that:

A. Pool and spa equipment is installed according to manufacturers' instructions and this chapter;

B. Valves, controls, gauges, filters, pumps, feeders, and other operating equipment are easily accessible;

C. Valves, controls, and piping are permanently numbered, labeled, or color-coded to identify their purpose or function; and

D. Operating instructions for the circulation and water treatment systems:

(1) Refer to the number, label, or color code of the valves, controls, and piping, and

(2) Are posted in the equipment room in a water-resistant cover.**1**

Plumbing.

A. Water Supply System.

(1) For a Category A aquatic venue, an owner shall ensure that the water supply system is in conformance with:

(a) The Model Aquatic Health Code;

(b) COMAR 26.04.01;

(c) COMAR 26.04.03;

(d) COMAR 26.04.04;

(e) COMAR 09.20.01; and

(f) Local plumbing code requirements.

(2) For a Category B aquatic venue, an owner shall ensure that the water supply system is in conformance with:

(a) COMAR 26.04.01;

(b) COMAR 26.04.03;

(c) COMAR 26.04.04;

(d) COMAR 09.20.01; and

(e) Local plumbing code requirements.

B. Sewage Disposal System.

(1) For a Category A aquatic venue, an owner shall ensure that a sewage disposal system is in conformance with:

(a) The Model Aquatic Health Code;

(b) COMAR 26.04.02;

(c) COMAR 26.04.03;

(d) COMAR 09.20.01; and

(e) Local plumbing code requirements.

(2) For a Category B aquatic venue, an owner shall ensure that a sewage disposal system is in conformance with:

(a) COMAR 26.04.02;

(b) COMAR 26.04.03;

(c) COMAR 09.20.01; and

(d) Local plumbing code requirements.

C. Drinking Fountains.

(1) For a Category A aquatic venue, an owner shall ensure that the number and placement of drinking fountains, as well as the drinking fountain itself complies with the Model Aquatic Health Code.

(2) For a Category B aquatic venue, an owner shall ensure that at least one drinking fountain is provided within 100 feet of the entrance gate to an aquatic venue, either inside or outside the natatorium, for every 5,000 square feet of water surface or splash zone area.

D. Hose Bibbs.

(1) For a Category A aquatic venue, an owner shall ensure that the number and placement of hose bibbs, as well as the hose bibb itself complies with the Model Aquatic Health Code.

(2) For a Category B aquatic venue, except as allowed in §D(3), an owner shall ensure that the following locations have an accessible hose bibb equipped with an atmospheric vacuum breaker:

(a) On the deck at 150 feet intervals;

(b) In:

(i) An equipment room;

(ii) A chemical storage area;

(iii) A bathroom; and

(iv) A bathhouse.

(3) An owner may substitute a hose bibb that is within 50 feet of a required location as long as the owner provides a hose that can service the entire area requiring the hose bibb.

E. Fill Spouts and Automatic Water Level Controllers.

(1) For a Category A aquatic venue, an owner shall ensure that the number and placement of fill spouts, as well as the fill spout itself complies with the Model Aquatic Health Code.

(2) For a Category B aquatic venue, an owner shall ensure that if a fill spout is installed at an aquatic venue, that the fill spout is:

(a) Installed in front of a lifeguard stand whose supports are immediately adjacent to the aquatic venue coping or within 10 inches of a ladder or handrail, so that the fill spout does not present a tripping or puncture hazard;

(b) Not installed over a seat bench;

(c) Braced or constructed so the fill spout does not flex downward;

(d) Provided with a flexible cover on the tip of the fill spout; and

(e) Installed with an air gap that:

(i) Is two times the diameter of the fill spout; and

(ii) Separates the fill spout from the maximum water level of the aquatic venue.

(3) If an automatic water level controller or inline manual fill is installed at an aquatic venue, the owner shall ensure that an air gap or other approved backflow prevention device is provided.

F. Backflow Prevention.

(1) For a Category A aquatic venue, an owner shall ensure that backflow protection is in compliance with the Model Aquatic Health Code.

(2) For a Category B aquatic venue, an owner shall ensure that backflow protection is provided for:

(a) A potable water supply, in conformance with COMAR 09.20.01; and

(b) Wastewater, in conformance with COMAR 09.20.01.

G. Source of Water.

(1) For a Category A aquatic venue, an owner shall ensure that water used to fill an aquatic venue is in compliance with the Model Aquatic Health Code.

(2) For a Category B aquatic venue, an owner shall ensure that:

(a) When an aquatic venue is filled with water from a non-potable source, such as a water tank holding non-potable water or surface water:

(i) The water is filtered, treated, and disinfected after addition to the aquatic venue to meet the requirements of Regulations .48 and .49 of this chapter; and

(ii) An aquatic venue is not used until a bacteriological sample taken by the Secretary indicates that there are no coliform organisms in the water; and

(b) Aquatic venue make-up water:

(i) Is from a potable source;

(ii) Having an iron level over 0.3 ppm is treated to lower the iron level to 0.3 ppm or less before the make-up water is added to an aquatic venue; and

(iii) Having a combined chlorine level over 0.4 ppm is treated to lower the combined chlorine level to less than 0.4 ppm before the make-up water is added to an aquatic venue.

.39 [Maintenance.

An owner of a public pool or spa shall ensure that:

A. An inspection of the pool or spa and related facilities is made at least once a week by the operator for the purpose of maintaining the pool or spa in compliance with this chapter;

B. The pool or spa and its related facilities are maintained in a safe, clean, and orderly condition;

C. A broken, damaged, or malfunctioning fixture is promptly repaired or replaced; and

D. The pool or spa is left in a safe condition when closed for the season.**1**

Toilet, Hand Sink, and Shower Facilities.

A. For a Category A aquatic venue, an owner shall ensure that:

(1) The number, placement and bathhouse, toilets, hand sinks, and showers themselves comply with the Model Aquatic Health Code; and

(2) The aquatic venue has a minimum number of toilets and handsinks based on fixture ratios in the American National Standard for Public Swimming Pools, Articles 19.1—19.6.13.

B. Except as provided in §C of this regulation, for a Category B aquatic venue an owner shall ensure that an aquatic venue has:

(1) A bathhouse, toilets, hand sinks, and showers within 100 feet walking distance of an entrance gate to the aquatic venue;

(2) At least a minimum number of toilets and hand sinks based on:

(a) The theoretical peak occupancy as set forth in Regulation .21B of this chapter;

(b) The fixture ratios in the American National Standard for Public Swimming Pools, Articles 19.1—19.6.13; and

(c) State and local building codes;

(3) At least a minimum number of showers based on:

(a) The user load as set forth in Regulation .21B of this chapter;

(b) The fixture ratios in the American National Standard for Public Swimming Pools, Articles 19.1—19.6.13; and

(c) State and local building codes;

(4) 50 percent of the required fixtures designated for use by each sex, unless the aquatic venue is for one sex only; and

(5) At least 50 percent of the required showers located within a bathhouse.

C. For a Category B aquatic venue, an owner is not required to provide toilets, handsinks and shower facilities at an aquatic venue when bathers have access to equivalent facilities in:

(1) Living quarters not more than 100 feet walking distance from an aquatic venue entrance; or

(2) A building or buildings not more than 100 feet walking distance from an aquatic venue entrance.

D. For a Category B aquatic venue, an owner is only required to provide 50 percent of the mandated toilets, handsinks and showers when bathers have access to equivalent facilities in:

(1) Living quarters not more than 500 feet walking distance from an aquatic venue entrance; or

(2) A building or buildings not more than 500 feet walking distance from an aquatic venue entrance.

E. An owner shall ensure that facilities equivalent to a bathhouse which are used by aquatic venue bathers and patrons of a recreational center, health club, marina, or other facility are in compliance with:

(1) Section A of this regulation; and

(2) State or local plumbing codes regarding fixtures and dressing area for the patrons sharing the equivalent facilities.

.40 [Public Pool and Spa Safety.

A. First Aid and Lifesaving Equipment. An owner shall ensure that:

(1) A recreational pool is provided with:

(a) A first aid kit as recommended by the American Red Cross;

(b) A face mask for CPR;

(c) Disposable medical grade examination gloves;

(d) A bloodborne pathogen control kit;

(e) A backboard designed for medical emergency use that is equipped with straps and head immobilizer;

(f) A light, strong rescue pole not less than 10 feet long; and

(g) A rescue tube designed for lifesaving for each required lifeguard;

(2) Except as set forth in §A(3) of this regulation, a public spa is provided with the safety equipment required in §A(1)(a)—(e) of this regulation;

(3) A semipublic spa is provided with the safety equipment required in §A(1)(a)—(d) of this regulation; and

(4) A semipublic pool is provided with a:

(a) Light, strong rescue pole not less than 10 feet long; and

(b) Ring buoy or similar approved floatation device with an attached throwing rope measuring 50 feet in length or 1 1/2 times the width of the pool, whichever is longer.

B. Telephone. An owner shall ensure that, in case of an emergency, a telephone is available within the pool or spa enclosure to individuals using a public pool or spa that:

(1) Can directly reach a 911 emergency service without the use of a coin and without connection to an internal switchboard;

(2) Is posted with:

(a) The names and phone numbers of the nearest available police, fire, and ambulance or rescue unit; or

(b) 911 or with any numbers necessary to reach a 911 emergency service center directly; and

(3) Is posted with the name and location of the pool or spa facility.

C. Lifeguard Chair.

(1) An owner shall ensure that a recreational pool is equipped with lifeguard chairs in compliance with the American National Standard for Public Swimming Pools.

(2) An owner may use a deck-level lifeguard chair in a designated area on the deck adjacent to shallow water instead of an elevated lifeguard chair.

D. Lifeguards.

(1) An owner of a public pool shall comply with:

(a) Local codes requiring lifeguards if the requirements of the local codes are stricter than the requirements set forth in §D(2)–(5) of this regulation; or

(b) §D(2)–(5) of this regulation if no local codes exist, or if the local codes requiring lifeguards are not as strict as the requirements of §D(2)–(5) of this regulation.

(2) Except as set forth in §D(1) and (3) of this regulation, an owner of a recreational pool shall have at least one lifeguard on duty on the deck observing the pool while an individual is in the pool, and shall have at the pool:

(a) Lifeguards who are appropriately trained and certified for the type of facility and activity in the pool;

(b) A sufficient number of lifeguards so that a lifeguard is on duty for each group of 50 individuals, or fraction thereof, in the pool; and

(c) In addition to the number of lifeguards required in §D(2)(b) of this regulation, additional lifeguards on duty if:

(i) The shape, dimensions, layout, use, activities, or features of the pool create potential safety hazards;

(ii) The vision of the required lifeguard or lifeguards is obstructed;

(iii) The capabilities of the individuals using the pool are substandard; or

(iv) Another condition exists that compromises the ability of a lifeguard to monitor the pool.

(3) An owner may use a lifeguard on the deck of a swimming pool to monitor an adjacent wading pool, but if a wading pool is the only pool at a facility or if the wading pool cannot be observed from the deck of the swimming pool, the owner shall ensure that lifeguards are provided at the wading pool in accordance with §D(1) and (2) of this regulation.

(4) In addition to meeting the other requirements of this chapter, an owner or operator of a facility specified in the following paragraphs shall ensure that a:

(a) Limited public-use pool has water safety supervision for pool activities in compliance with Regulation .15 of this chapter;

(b) Child care center has water safety supervision for pool activities at a child care center in compliance with COMAR 07.04.02.41; and

(c) Youth camp has water safety supervision for pool activities at a youth camp in compliance with COMAR 10.16.06.

(5) The owner may only use or employ a lifeguard who holds a valid lifeguard certification from:

- (a) The American Red Cross;
- (b) The Boy Scouts of America, not including a lifesaving merit badge;
- (c) The Young Men's Christian Association;
- (d) Ellis and Associates' National Pool and Waterpark Lifeguard Training; or
- (e) An organization that has a lifeguard training program equivalent to the American Red Cross lifeguard training.

(6) Except as set forth in §D(1) and (3) of this regulation, an owner of a semipublic pool that has a water surface area greater than 2,500 square feet or that is part of a multiple pool facility within one enclosure that has a combined water surface area greater than 2,500 square feet shall ensure that at least one lifeguard is on duty on the deck observing a pool in the ratio of one guard per 50 individuals in the water:

- (a) During the peak seasonal use of the pool from Memorial Day to Labor Day; and
- (b) During the use of an indoor, heated pool throughout the entire year.

E. CPR and First-Aid Personnel. Except at a semipublic spa, an owner of a recreational pool, public spa, and a limited public use pool shall ensure that:

(1) When the pool or spa is open for use, an individual is present and on site, holding a valid certification for:

- (a) Infant/child/adult or professional rescuer cardiopulmonary resuscitation (CPR); and
- (b) First aid; and

(2) The CPR and first aid certifications of the individual required in §E(1) of this regulation are from:

(a) A national organization offering certification in CPR or first aid, such as the:

- (i) American Red Cross;

(ii) American Heart Association; or

(iii) National Safety Council;

(b) The Emergency Medical Services; or

(c) An organization that has a certification program in CPR or first aid that is approved by one of the organizations listed in §E(2) of this regulation.

F. Safety Signs. An owner of a public pool or spa shall ensure that:

(1) The size, color, design, application, symbol, and visual layout of a safety sign is in compliance with the ANSI Z-535 series of standards for Safety Signs and Colors as referenced in American National Standard for Public Spas;

(2) A spa safety sign is posted in a permanent location adjacent to a spa in compliance with the American National Standard for Public Spas;

(3) The spa safety sign includes the user load of the spa;

(4) A chemical warning sign is posted at the entrance door to a chemical storage area and includes the text "Caution! Chemical Storage Area";

(5) A chemical vat, feeder, pump, and line is labeled to identify the chemical in use;

(6) A chlorine gas warning sign reading "Danger—Chlorine Gas" is posted at the entrance to a chlorine gas feed room and storage area;

(7) Other warning, health advisory, and safety signs are posted if necessary to protect the public health and safety, for example, "Danger! No Diving In Shallow Water";

(8) A semipublic pool or public spa that does not have a lifeguard on duty has a conspicuous sign posted adjacent to entrances to the pool or spa reading "WARNING; NO LIFEGUARD ON DUTY. **SWIM AT YOUR OWN RISK.** DO NOT SWIM ALONE. CHILDREN UNDER 15 SHOULD NOT USE THE POOL WITHOUT ADULT SUPERVISION."; and

(9) House rules are posted at the entrance to a pool or spa.¹

Anti-scald Protection for Showers.

An owner of an aquatic venue shall ensure that each shower has an approved pressure-balanced, anti-scald device that limits the delivered water temperature to below 115°F.

.41 [Pool and Spa Operator Certification.]

A. A person may not act as or perform the duties of a public pool or spa operator without a pool and spa operator certification card issued by the Secretary as required in §§B and G of this regulation.

B. The Secretary shall issue a 3-year public pool and spa operator certification card only to an individual 16 years old or older who has:

(1) Completed a 14-hour approved public pool and spa operator's course or a course offered by the Secretary with a minimum grade of 70 percent on an approved written examination given following the completion of that course; or

(2) Presented proof of previous certification and has:

(a) Completed an approved 4-hour refresher course; or

(b) Passed a challenge exam offered by the Secretary.

C. The Secretary may summarily suspend a pool and spa operator's certification if the operator does not comply with Regulation .43 of this chapter.

D. Hearing for Summary Suspension. In the case of the summary suspension of certification pursuant to §C of this regulation, the Secretary shall provide the certification card holder with written notice of the suspension and an opportunity for a hearing pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland.

E. To preserve the right to a hearing, the certification card holder shall contact the Secretary within 30 days of the receipt of the notice of the suspension.

F. The Secretary shall recognize a pool and spa operator certification as valid throughout the State.

G. The Secretary shall issue a 3-year limited public-use pool operator certification card to an individual 16 years old or older who has completed:

(1) An approved 4-hour limited public-use pool operator's course and passed an approved written examination with a minimum grade of 75 percent following completion of the course; or

(2) The requirements of §B of this regulation.

H. An individual who possesses a public pool and spa operator certification card may perform the duties of a public pool and spa operator at a limited public-use, recreational, and semipublic pool and public spa. An individual who possesses a limited public-use pool operator certification card may perform the duties of a limited public-use pool operator only at a limited public-use pool.¹

Accommodations for Disabled Individuals.

A. For a Category A aquatic venue, an owner shall ensure that an aquatic venue is in compliance with:

(1) The Model Aquatic Health Code; and

(2) All applicable federal, State, and local codes governing facilities for disabled individuals, including COMAR 05.02.02.

B. For a Category B aquatic venue, an owner shall ensure that an aquatic venue is in compliance with all applicable federal, State, and local codes governing facilities for disabled individuals, including COMAR 05.02.02.

.42 [Approval of Operator's Course.

The Secretary shall approve a pool and a spa operator's course based on the following criteria:

A. An approved course shall cover general aspects of public pool and spa operation including:

(1) Applicable regulations,

(2) Disease prevention,

(3) Disinfection,

(4) Filtration,

(5) Circulation system components,

- (6) General pool and spa equipment,
- (7) Operation and maintenance of equipment,
- (8) Water chemistry,
- (9) Water testing,
- (10) Record keeping,
- (11) General pool and spa chemicals,
- (12) Chemical handling,
- (13) Waste water disposal,
- (14) Safety,
- (15) Sanitation, and
- (16) Other pertinent topics as specified by the Secretary; and

B. An approved course shall be taught by an individual who has demonstrated to the Secretary:

- (1) Expertise in the operational aspects listed in §A of this regulation, as evidenced by combined work experience, training, and formal education, and
- (2) Successful completion of an approved public pool and spa operator's course.¹

Equipment Installation and Operating Instructions.

A. For a Category A aquatic venue, an owner shall ensure that:

(1) Aquatic venue equipment is installed according to the manufacturers' instructions and the Model Aquatic Health Code;

(2) Valves, controls, gauges, filters, pumps, feeders, and other operating equipment are identified according to the Model Aquatic Health Code; and

(3) Operating instructions for the circulation and water treatment systems:

(a) Refer to the number, label, or color code of the valves, controls, and piping; and

(b) Are compliant with the Model Aquatic Health Code.

B. For a Category B aquatic venue, an owner shall ensure that:

(1) Aquatic venue equipment is installed according to manufacturers' instructions and this chapter;

(2) Valves, controls, gauges, filters, pumps, feeders, and other operating equipment are easily accessible;

(3) Valves, controls, and piping are permanently numbered, labeled, or color-coded to identify their purpose or function; and

(4) Operating instructions for the circulation and water treatment systems:

(a) Refer to the number, label, or color code of the valves, controls, and piping; and

(b) Are posted in the equipment room in a water-resistant cover.

.43 [Pool and Spa Operation.

An owner shall ensure that a certified pool and spa operator:

A. Is on site at all times when a recreational pool is open;

B. Is available at a semipublic pool, public spa, and at a limited public-use pool for performance of all requirements of this chapter and is able to respond to operational problems within 15 minutes when not available on site;

C. Measures and records, or supervises and verifies the measurement and recording of, all information required in Regulation .46 of this chapter;

D. Performs all duties related to the operation of a pool or spa as required in this chapter;

E. Cleans the filtration system when the filter pressure differential reaches a level specified by the equipment's manufacturer or as specified below:

(1) High rate sand filters at 15 psi,

(2) Rapid rate sand filters at 8 psi,

(3) Cartridge filters at 10 psi,

(4) Pressure diatomaceous earth filters at 10 psi, and

(5) Vacuum diatomaceous earth filters at 15 inches of mercury;

F. Maintains disinfection residuals according to Regulation .44 of this chapter;

G. Maintains water chemistry according to Regulation .45 of this chapter; and

H. Adds a nonstabilized oxidizer into the pool or spa water equivalent to an amount of free chlorine equal to at least 10 times the measured combined chlorine residual plus sufficient free chlorine to oxidize the ammonia and nitrogenous compounds in the water, on a recommended schedule of once per week for a pool and once per day for a wading pool and for a spa.¹

Maintenance.

A. For a Category A aquatic venue, an owner shall ensure that:

(1) An inspection of an aquatic facility and venue is made in accordance with the requirements of the Model Aquatic Health Code;

(2) An aquatic facility and venue is maintained according to the Model Aquatic Health Code;

(3) A broken, damaged, or malfunctioning component is promptly repaired or replaced; and

(4) An aquatic facility and venue are left in a safe condition when closed for the season according to the Model Aquatic Health Code.

B. For a Category B aquatic venue, an owner shall ensure that:

(1) An inspection of an aquatic facility and venue is made at least once a day by the qualified operator for the purpose of maintaining an aquatic facility and venue in compliance with this chapter;

(2) An aquatic facility and venue is maintained in a safe, clean, and orderly condition;

(3) A broken, damaged, or malfunctioning component is promptly repaired or replaced; and

(4) An aquatic facility and venue are left in a safe condition when closed for the season.

.44 [Disinfection of a Pool and Spa.

A. An owner or operator of a public pool or spa shall ensure that a disinfectant or combination of disinfectants is added to the water automatically through an approved chemical feeder to maintain continuously a residual level as specified below:

(1) Free chlorine shall be between:

(a) 1.5 ppm and 10.0 ppm in pools for swimming and diving and water recreational attractions;

(b) 3.0 ppm and 10.0 ppm in pools for wading or therapy; and

(c) 4.0 ppm and 10.0 ppm in spas;

(2) The maximum amount of combined chlorine shall be 0.2 ppm for all pools and spas;

(3) Total bromine shall be between:

(a) 3.0 ppm and 8.0 ppm in pools for swimming and diving and water recreational attractions; and

(b) 4.0 ppm and 8.0 ppm in spas and in pools for wading or therapy;

(4) For pools and spas using copper and silver ions as a secondary disinfectant in conjunction with chlorine or bromine as a primary disinfectant:

(a) Copper ions shall be between 0.2 ppm and 1.0 ppm;

(b) Silver ions may not exceed 0.05 ppm;

(c) Free chlorine in combination with copper and silver ions shall be between:

(i) 0.5 ppm and 10 ppm in pools for swimming and diving and water recreational attractions, and

(ii) 1.5 ppm and 10.0 ppm in spas and in a pool for wading or therapy; and

(d) Total bromine in combination with copper and silver ions shall be between:

(i) 1.0 ppm and 8.0 ppm in pools for swimming and diving and water recreational attractions, and

(ii) 3.0 ppm and 8.0 ppm in spas and pools for wading or therapy;

(5) For pools and spas using an ozone generator, the maximum amount of ozone measured 2 inches above the water surface shall be 0.1 ppm;

(6) For pools using PHMB, the minimum level of PHMB shall be 30 ppm; and

(7) For pools and spas using an ultraviolet light/hydrogen peroxide system, the minimum level of hydrogen peroxide shall be 20 ppm.

B. An owner or operator shall ensure that for public pools and spas using cyanuric acid or a similar chlorine stabilizer, the cyanuric acid is maintained between 30 ppm and 100 ppm.

C. An owner or operator of a public pool or spa may not use:

(1) PHMB in a pool or spa that uses jets or sprays;

(2) PHMB in conjunction with any halogen compound or ozone;

(3) Cyanuric acid in conjunction with a bromine compound or in an indoor pool or spa; or

(4) An ultraviolet light/hydrogen peroxide system in conjunction with a diatomaceous earth filter.¹

Aquatic Facility and Venue Safety.

A. First Aid and Lifesaving Equipment.

(1) For a Category A aquatic venue, an owner shall ensure that the aquatic venue first aid and lifesaving equipment required by the Model Aquatic Health Code.

(2) For a Category B recreational pool, an owner shall ensure that the pool is provided with a:

(a) Continuously stocked, adequate supply of first aid supplies to include, at a minimum:

- (i) A First Aid Guide;
- (ii) Absorbent compresses;
- (iii) Adhesive bandages;
- (iv) A roll of adhesive tape;
- (v) Sterile pads;
- (vi) Scissors;
- (vii) A roll of elastic wrap;
- (viii) An emergency blanket;
- (ix) A resuscitation mask with one-way valve; and
- (x) Disposable medical grade examination gloves;
- (b) Blood borne pathogen control kit, to include, at a minimum:
 - (i) Three antimicrobial towelettes;
 - (ii) One – 7 to 10 gallon biohazard bag with tie;
 - (iii) One bottle of alcohol gel;
 - (iv) One roll of body fluid clean-up kit paper;
 - (v) One pair of nitrile ANSI gloves;
 - (vi) One – 2 ounce bag of absorbent powder;
 - (vii) One bag;
 - (viii) One scoop; and
 - (ix) One small scraper;
- (c) Backboard designed for medical emergency use that is equipped with straps and head immobilizer;
- (d) Light, strong rescue pole not less than 10 feet long; and

(e) Rescue tube designed for lifesaving for each required lifeguard;

(3) For a Category B public spa, an owner shall ensure that the spa is provided with the safety equipment required by §A(1)(a)—(c) of this regulation;

(4) For a Category B semipublic spa or public spray ground, an owner shall ensure that the spa or spray ground is provided with the safety equipment required by §A(1)(a)—(b) of this regulation; and

(5) For a Category B semipublic pool, an owner shall ensure that the pool is provided with a:

(a) Light, strong rescue pole not less than 10 feet long; and

(b) Ring buoy or similar approved floatation device with an attached throwing rope measuring 50 feet in length or 1.5 times the width of the pool, whichever is longer.

B. Telephone.

(1) For a Category A aquatic venue, an owner shall ensure that an emergency telephone is provide that complies with the Model Aquatic Health Code.

(2) For a Category B aquatic venue, an owner shall ensure that, in case of an emergency, a telephone is available within the aquatic venue barrier to individuals using an aquatic venue that:

(a) For a recreational pool, public spa, or public spray ground:

(i) Can directly reach a 911 emergency service without the use of a coin and without connection to an internal switchboard;

(ii) Is posted with the names and phone numbers of the nearest available police, fire, and ambulance or rescue unit, 911 or with any numbers necessary to reach a 911 emergency service center directly; and

(iii) Is posted with the name and physical address of the aquatic venue; and

(b) For a semipublic pool:

(i) Except for a guarded pool that is compliant with §B(1) of this regulation, can directly reach a 911 emergency service without dialing, the use of a coin, and without connection to an internal switchboard; and

(ii) Complies with §B(1) of this regulation.

C. Lifeguard Chair.

(1) For a Category A aquatic venue, an owner shall ensure that the aquatic venue is equipped with lifeguard chairs in compliance with the Model Aquatic Health Code.

(2) For a Category B aquatic venue,:

(a) An owner shall ensure that a recreational pool is equipped with lifeguard chairs in compliance with the American National Standard for Public Swimming Pools; and

(b) An owner may use a deck-level lifeguard chair in a designated area on the deck adjacent to shallow water instead of an elevated lifeguard chair.

D. Lifeguards.

(1) For a Category A aquatic venue, an owner shall comply with the lifeguard requirements of the Model Aquatic Health Code.

(2) For a Category B aquatic venue, an owner of a public pool shall comply with:

(a) Local codes requiring lifeguards if the requirements of the local codes are stricter than the requirements set forth in §D(3)—(6) of this regulation; or

(b) §D(3)—(6) of this regulation if no local codes exist, or if the local codes requiring lifeguards are not as strict as the requirements of §D(3)—(6) of this regulation.

(3) Except as set forth in §D(2) and (4) of this regulation, for a Category B aquatic venue, an owner of a recreational pool shall have at least one lifeguard on duty on the deck observing the pool while patrons are inside the pool barrier, and shall have at the pool:

(a) Lifeguards who are appropriately trained and certified for the type of facility and activity in the pool;

(b) A sufficient number of lifeguards so that a lifeguard is on duty for each group of 50 individuals, or fraction thereof, in the pool; and

(c) In addition to the number of lifeguards required by §D(2) of this regulation, additional lifeguards on duty if:

(i) The shape, dimensions, layout, use, activities, or features of the pool create potential safety hazards;

(ii) The vision of the required lifeguard or lifeguards is obstructed;

(iii) The capabilities of the individuals using the pool are substandard; or

(iv) Another condition exists that compromises the ability of a lifeguard to monitor the pool.

(4) For a Category B aquatic venue, an owner may use a lifeguard on the deck of a swimming pool to monitor an adjacent wading pool, but if a wading pool is the only pool at a facility or if the wading pool cannot be observed from the deck of the swimming pool, the owner shall ensure that lifeguards are provided at the wading pool in accordance with §D(2) and (3) of this regulation.

(5) In addition to meeting the other requirements of this chapter, for a Category B aquatic venue, an owner or qualified operator of an aquatic facility specified in the following paragraphs shall ensure that a:

(a) Limited public-use pool has water safety supervision for pool activities in compliance with Regulation .16 of this chapter;

(b) Child care center has water safety supervision for pool activities at a child care center in compliance with COMAR 13A.15.08.04; and

(c) Youth camp has water safety supervision for pool activities at a youth camp in compliance with COMAR 10.16.06.

(6) For a Category B aquatic venue, the owner may only use or employ a lifeguard who holds a valid lifeguard certification from:

(a) The American Red Cross;

(b) The Boy Scouts of America, not including a lifesaving merit badge;

(c) The Young Men's Christian Association;

(d) Ellis and Associates International Lifeguard Training Program; or

(e) An organization that has a lifeguard training program equivalent to the American Red Cross lifeguard training.

(7) Except as set forth in §D(2) and (4) of this regulation, for a Category B aquatic venue, an owner of a semipublic pool that has a water surface area greater than 2,500 square feet or that is part of a multiple pool facility within one enclosure that has a combined water surface area greater than 2,500 square feet shall ensure that at least one lifeguard is on duty on the deck observing a pool at all times patrons are within the pool barrier and in the ratio of one lifeguard per 50 individuals in the water:

(a) During the peak seasonal use of the pool from Memorial Day to Labor Day; and

(b) During the use of an indoor, heated pool throughout the entire year.

E. CPR and First Aid Personnel.

(1) For a Category A aquatic venue, an owner shall ensure that CPR and first aid personnel comply with the Model Aquatic Health Code.

(2) Except at a semipublic pool, semipublic spa, or public spray ground, for a Category B aquatic venue an owner shall ensure that:

(a) When the aquatic venue is open for use, an individual is present and on site, holding a valid certification for:

(i) Infant/child/adult or professional rescuer CPR; and

(ii) First aid; and

(b) The CPR and first aid certifications of the individual required by §E(2) of this regulation are from:

(i) A national organization offering certification in CPR or first aid, such as the American Red Cross, American Heart Association, National Safety Council;

(ii) The Emergency Medical Services; or

(iii) An organization that has a certification program in CPR or first aid that is approved by one of the organizations listed in §E(2) of this regulation.

F. Safety Signs.

(1) For a Category A aquatic venue, an owner shall ensure that safety signs comply with the Model Aquatic Health Code.

(2) For a Category B aquatic venue, an owner shall ensure that:

(a) The size, color, design, application, symbol, and visual layout of a safety sign is in compliance with the ANSI Z-535 series of standards for Safety Signs and Colors as referenced in American National Standard for Public Spas;

(b) A spa safety sign is posted in a permanent location adjacent to a spa in compliance with the American National Standard for Public Spas;

(c) The spa safety sign includes the user load of the spa;

(d) A chemical warning sign is posted at the entrance door to a chemical storage area and includes the text "Caution! Chemical Storage Area";

(e) A chemical vat, feeder, pump, and line is labeled to identify the chemical in use;

(f) A chlorine gas warning sign reading "Danger—Chlorine Gas" is posted at the entrance to a chlorine gas feed room and storage area;

(g) Other warning, health advisory, and safety signs are posted if necessary to protect the public health and safety, for example, "Danger! No Diving In Shallow Water";

(h) A semipublic pool or public spa that does not have a lifeguard on duty has a conspicuous sign posted adjacent to entrances to the pool or spa reading "WARNING; NO LIFEGUARD ON DUTY. **SWIM AT YOUR OWN RISK. DO NOT SWIM ALONE. CHILDREN UNDER 15 SHOULD NOT USE THE POOL WITHOUT ADULT SUPERVISION.**";

(i) House rules are posted at the entrance to an aquatic venue; and

(j) A conspicuous sign posted adjacent to entrances to the aquatic venue reading, "Use of a public pool, spa, or spray ground is prohibited if you have an infectious or contagious disease that may be transmitted through water, an open cut, blister, other lesion, or diarrhea."

.45 [Water Chemistry of a Pool and Spa.

A. An owner or operator shall ensure that the water chemistry of a public pool or spa is maintained according to the following requirements:

- (1) The pH of the water is maintained between 7.2 and 7.8;
- (2) The total alkalinity of the water is maintained between 60 ppm and 180 ppm;
- (3) The calcium hardness of the water is maintained between 150 and 400 ppm;
- (4) The Langelier Saturation Index of the water is maintained between -0.5 and +0.5 as calculated by:

(a) The Langelier Saturation Index formula: $\text{Langelier Saturation Index} = \text{pH} + \text{TF} + \text{CF} + \text{AF} - 12.1$ where: TF = temperature factor, CF = calcium hardness factor, and AF = alkalinity factor, and

(b) The following factor table:

Temperature (°F)	Temperature Factor	Calcium Hardness (ppm)	Calcium Factor	Total Alkalinity (ppm)	Alkalinity Factor
32	0.0	5	0.3	5	0.7
37	0.1	25	1.0	25	1.4
46	0.2	50	1.3	50	1.7
53	0.3	75	1.5	75	1.9
60	0.4	100	1.6	100	2.0
66	0.5	150	1.8	150	2.2
76	0.6	200	1.9	200	2.3
84	0.7	300	2.1	300	2.5
94	0.8	400	2.2	400	2.6
105	0.9	800	2.5	800	2.9
128	1.0	1000	2.6	1000	3.0

(5) The amount of total dissolved solids is maintained so that it does not exceed 1,500 ppm, except for a salt water pool where the total dissolved solids may not exceed 3,000 ppm;

(6) The amount of dissolved metals is maintained so that it does not exceed the following levels:

(a) Iron, 0.3 ppm,

(b) Manganese, 0.3 ppm, and

(c) Copper, 1.3 ppm; and

(7) The water clarity is maintained so that either a 6 inch seechi disc placed in the deepest part of a pool or spa or the main drain is clearly visible and sharply defined when observed from the side of the pool or spa.

B. An owner or operator shall ensure that:

(1) Water additives and treatment chemicals are used according to manufacturers' instructions; and

(2) When chemicals are added directly to a pool or spa, no one is allowed in the water until the chemicals are dissolved and diffused throughout the pool or spa.

C. An owner or operator shall ensure that the water temperature for a heated public pool or spa does not exceed:

(1) 88°F for a pool;

(2) 104°F for a spa; and

(3) 96°F for a therapy pool.¹

Aquatic Venue Qualified Operator Certification.

A. An individual may not act as or perform the duties of an aquatic venue qualified operator if the individual does not possess a valid Aquatic Venue Qualified Operator Certification Card issued by the Secretary as required by §C of this regulation.

B. An owner of an aquatic venue shall not allow an individual to act as or perform the duties of an aquatic venue qualified operator if the individual does not possess a valid Aquatic Venue Qualified Operator Certification Card issued by the Secretary as required by §C of this regulation.

C. Initial Aquatic Venue Qualified Operator Certification Card. The Secretary shall issue an initial Aquatic Venue Qualified Operator Certification Card:

(1) Level 1 to an individual who:

(a) Is 16 years old or older;

(b) Has completed an 8 hour Level 1 Aquatic Venue Qualified Operator course approved by the Secretary and passed, with a minimum grade of 75 percent, a written exam approved by the Secretary; and

(c) Is employed by a person with a valid Aquatic Venue Qualified Operator Certification Card Level 3.

(2) Level 2 to an individual who:

(a) Is 18 years old or older; and

(b) Has completed a 14 hour Level 2 Aquatic Venue Qualified Operator course approved by the Secretary and passed, with a minimum grade of 75 percent, a written exam approved by the Secretary; and

(3) Level 3 to an individual who:

(a) Is 18 years old or older; and

(b) Has completed a 14 hour or more Level 3 Aquatic Venue Qualified Operator course approved by the Secretary and passed, with a minimum grade of 75 percent, a written exam approved by the Secretary.

D. Renewing an Aquatic Venue Qualified Operator Certification Card. The Secretary shall renew an Aquatic Venue Qualified Operator Certification Card:

(1) Level 1 for an individual who:

(a) Is 16 years old or older;

(b) Presents a current Aquatic Venue Qualified Operator Certification Card Level 1;

(c) Has:

(i) Completed a 4 hour Level 1 refresher course approved by the Secretary, and passed, with a minimum grade of 75 percent, a written exam approved by the Secretary; or

(ii) Passed, with a minimum grade of 75 percent, a Level 1 Challenge Exam offered by the Secretary; and

(d) Is employed by a person with a valid Aquatic Venue Qualified Operator Certification Card Level 3.

(2) Level 2 for an individual who:

(a) Is 18 years old or older;

(b) Presents a current Aquatic Venue Qualified Operator Certification Card Level 2; and

(c) Has:

(i) Completed a 7 hour Level 2 refresher course approved by the Secretary, and passed, with a minimum grade of 75 percent, a written exam approved by the Secretary; or

(ii) Passed, with a minimum grade of 75 percent, a Level 2 Challenge Exam offered by the Secretary; and

(3) Level 3 for an individual who:

(a) Is 18 years old or older;

(b) Presents a current Aquatic Venue Qualified Operator Certification Card Level 3; and

(c) Has:

(i) Completed a 7 or more hour Level 3 refresher course approved by the Secretary, and passed, with a minimum grade of 75 percent, a written exam approved by the Secretary; or

(ii) Passed, with a minimum grade of 75 percent, a Level 3 Challenge Exam offered by the Secretary.

E. Retaking an Exam. An individual who fails an exam, required by §§C or D of this regulation, may retake the exam one time without having to repeat the required course.

F. Certification Card Expiration. An Aquatic Venue Qualified Operator Certification Card:

(1) Level 1 shall be valid for 1 year from the date the individual complies with §§C or D of this regulation;

(2) Level 2 shall be valid for 3 years from the date the individual complies with §§C or D of this regulation; and

(3) Level 3 shall be valid for 5 years from the date the individual complies with §§C or D of this regulation.

G. Summary Suspension.

(1) The Secretary may summarily suspend an Aquatic Venue Qualified Operator Certification Card for 6 months if the qualified operator does not comply with Regulation .47 of this chapter.

(2) Hearing for Summary Suspension. In the case of the summary suspension of certification pursuant to §G(1) of this regulation, the Secretary shall provide the certification card holder with written notice of the suspension and an opportunity for a hearing pursuant to State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland.

(3) Preserving Hearing Rights. To preserve the right to a hearing, the certification card holder shall contact the Secretary in writing within 10 calendar days of the receipt of the notice of the suspension.

(4) Application After Suspension. An aquatic venue qualified operator whose certification card is suspended may apply for a new certification card:

(a) At the conclusion of the suspension period specified in §G(1) of this regulation; and

(b) After completing the training requirements in §C of this regulation post suspension.

H. The Secretary shall recognize an Aquatic Venue Qualified Operator Certification Card as valid throughout the State.

.46 [Operating Records Required.

An operator shall maintain operating records on a form provided by the Secretary or an equivalent form and shall:

A. Except as provided in §B of this regulation, record the information required in §C(1)–(3) of this regulation in 2-hour intervals for a recreational pool and for a public spa, and three times per day for a limited public-use and semipublic pool and record the information required in §C(4)–(9) of this regulation a minimum of three times per day for a public pool and spa, beginning 1/2 hour before opening;

B. For a public pool or spa where an approved automatic controller is used, record the information required in §C of this regulation:

(1) A minimum of three times per day in conformance with the following schedule:

(a) The first recording of the day shall be made 1/2 hour before the pool or spa opens,

(b) The second recording shall be completed between 12 p.m. and 2 p.m., and

(c) The final recording shall be completed 2 hours before closing; and

(2) More frequently if required by the Secretary due to conditions such as high bather load, high temperatures, bright sunlight, or inadequate water quality;

C. Record the following information in the intervals required in §§A and B of this regulation:

(1) Disinfectant residual;

(2) Combined chlorine level, if chlorine is used;

(3) pH;

(4) Water clarity;

(5) Water temperature, if heated;

(6) Flow rate;

(7) Filter influent pressure and effluent pressure;

(8) Pump vacuum; and

(9) Total number of bathers;

D. Record in 1-week intervals for a public pool and in 1-day intervals for a public spa:

(1) Total alkalinity level;

(2) Calcium hardness level; and

(3) Cyanuric acid level, if used;

E. Record daily for a public pool or spa:

(1) The time of filter backwash or cleaning;

(2) An injury or accident at the pool or spa;

(3) Chemicals added to the water; and

(4) Malfunctioning or broken equipment;

F. Date and sign each record sheet;

G. Record the results of the following inspections in the specified intervals to complete a Pool and Spa Entrapment Hazards Checklist:

(1) Daily check before the facility is open to verify that:

(a) Drain covers, vacuum fitting covers, skimmer equalizer covers, and any other suction outlet covers are in place, secure, and unbroken,

(b) Skimmer baskets, weirs, lids, flow adjusters, and suction outlet lines are free of any blockage,

(c) Inlet and return covers or fittings are in place, secure, and unbroken,

(d) Safety warning signs are in place around the pool or spa, including emergency instructions and phone numbers, and

(e) On/off switches for pumps are clearly labeled and the location of the pumps is clearly identified; and

(2) Check all information required in §G(1) of this regulation before filling a pool or spa with water, after periodic maintenance, and after pool or filter cleaning procedures;

H. Keep the records on the premises for a minimum of 3 years; and

I. Submit the records to the Secretary upon request.¹

Approval of Qualified Operator Course.

The Secretary shall approve an Aquatic Venue Qualified Operator course based on the following criteria:

A. An approved Level 1 course shall cover the following aspects of aquatic venue operation:

(1) Water chemistry, which shall cover water balance, saturation index, and dosing;

(2) Water testing, which shall cover testing methods and frequency;

(3) Record keeping and required reporting;

(4) Entrapment hazards, which shall cover the Virginia Graeme Baker Pool and Spa Safety Act (VGB), gates and entry to the aquatic venue, barriers, and drain covers;

(5) Filtration, which shall cover types of filters, normal operation, filter backwashing, cleaning, and pressure;

(6) Circulation, which shall cover turnover rates, flow rates, and turnover times;

(7) Circulation system components, operation, and maintenance;

(8) General aquatic venue maintenance and cleaning equipment;

(9) State and local regulations; and

(10) Other pertinent topics as specified by the Secretary.

B. An approved Level 2 course shall cover general aspects of aquatic venue operation including:

(1) State and local regulations;

(2) Disease prevention, which shall cover CT values, recreational water infections (RWI), and response to formed-stool, diarrhea, blood, and vomit in and around an aquatic venue;

(3) Disinfection, which shall cover sanitation, cyanuric acid, non-chlorine oxidizers, combine chlorine, breakpoint chlorination, and alternate and supplemental systems;

(4) Filtration, which shall cover types of filters, normal operation, filter backwashing, cleaning, and pressure;

(5) Circulation, which shall cover turnover rates, flow rates, and turnover times;

(6) Circulation system components, operation, and maintenance;

(7) General aquatic venue maintenance and cleaning equipment;

(8) Water chemistry, which shall cover water balance, saturation index, and dosing;

(9) Water testing, which shall cover testing methods and frequency;

(10) Record keeping and required reporting;

(11) Other aquatic venue chemicals, which shall cover water clarifiers, stain and scale inhibitors, enzymes, oxidizers, algae prevention, problems related to green hair, and other issues;

(12) Other Aquatic Venues which shall cover spas and spray grounds;

(13) Waste water disposal;

(14) Safety, which shall cover risk management and reduction, the Virginia Graeme Baker Pool and Spa Safety Act (VGB), gates and entry to the aquatic venue, barriers, chemical handling, spills, storage and disposal, safety equipment, and spa shut-off switch; and

(15) Other pertinent topics as specified by the Secretary.

C. An approved Level 3 course shall comply with the "Essential Topics in Qualified Operator Training Courses" section of the Model Aquatic Health Code.

D. An approved course shall be taught by an individual who has demonstrated to the Secretary:

(1) Expertise in the operational aspects listed in "Essential Topics in Qualified Operator Training Courses" section of the Model Aquatic Health Code, as evidenced by combined work experience, training, and formal education; and

(2) Current certification as an Aquatic Venue Qualified Operator Level 3, according to Regulation .45 of this chapter.

E. An individual approved to teach according to §D of this regulation may conduct the course online provided an individual taking the course completes in person the written examination required by Regulation .45 of this chapter.

F. The Secretary may audit an Aquatic Venue Qualified Operator Course, the course materials, or the instructor's credentials at any time.

.47 [Test Kits.

A. In order to comply with the requirements of Regulation .46 of this chapter, an owner shall ensure that:

(1) One or more of the following for measuring the disinfectant level is used:

(a) A chlorine or bromine test kit that is the DPD (diethyl-p-phenylene diamine) reagent system for measuring free and combined chlorine or total bromine with an indicator range from 0.0 to 10.0 ppm or with procedures for performing a dilution test to achieve readings up to 10.0 ppm.

(b) An ozone test kit that is the indigo trisulfonate method for measuring ozone with an indicator range from 0.0 to 1.0 ppm,

(c) A copper test kit that is accurate to within +/- 0.1 ppm for measuring copper,

(d) A PHMB test kit with an indicator range from 0.0 ppm to 75 ppm, or

(e) A hydrogen peroxide test kit that is the DPD reagent system with an indicator range from 0.0 to 40 ppm;

(2) A phenol red test is used to measure pH with an indicator range from at least 7.0 to 8.0;

(3) An alkalinity titration test is used to measure alkalinity as milligrams per liter calcium carbonate;

(4) An EDTA (ethylenediamine-tetraacetate) hardness test is used to measure calcium hardness as milligrams per liter calcium carbonate; and

(5) A cyanuric acid test kit with an indicator range from 0 to 100 ppm is used if cyanuric acid is used in the pool or spa.

B. In order to comply with the requirements of Regulation .46 of this chapter, an owner may monitor:

(1) Chlorine and bromine residuals by measuring the oxidation-reduction potential (ORP) of the water before the disinfectant injection point; and

(2) The pH with a pH meter.

C. If an ORP or pH meter is used, an owner shall ensure that:

(1) Periodic calibration is performed on these instruments to assure accurate measurements; and

(2) Manual measurements are performed on a daily basis.¹

Aquatic Venue Operation.

A. Except for a recreational pool, an owner shall ensure that an individual holding an Aquatic Venue Qualified Operator Certification Card Level 1 or higher is on site at all times when an aquatic venue is open.

B. An owner of a recreational pool shall ensure that an individual holding an Aquatic Venue Qualified Operator Certification Card Level 2 or higher is on site at all times when an aquatic venue is open.

C. An Aquatic Venue Qualified Operator Level 1 may, while working for a person holding an Aquatic Venue Qualified Operator Level 3, under the scope of this certification:

(1) Measure and record all information required by Regulation .50 of this chapter;

(2) Clean the filtration system when the filter pressure differential reaches a level specified by the equipment's manufacturer or as specified below:

(a) High rate sand filters at 15 psi;

(b) Rapid rate sand filters at 8 psi;

(c) Cartridge filters at 10 psi;

(d) Pressure diatomaceous earth filters at 10 psi; and

(e) Vacuum diatomaceous earth filters at 15 inches of mercury; and

(3) Notify the person holding the Aquatic Venue Qualified Operator Certification Card Level 3 when water chemistry is outside requirements of Regulation .49 of this chapter.

D. An Aquatic Venue Qualified Operator Level 2 may, under the scope of this certification,:

(1) Measure and record all information required by Regulation .50 of this chapter;

(2) Perform all duties related to the operation of an aquatic venue as required by this chapter;

(3) Clean the filtration system when the filter pressure differential reaches a level specified by the equipment's manufacturer or as specified below:

(a) High rate sand filters at 15 psi;

(b) Rapid rate sand filters at 8 psi;

(c) Cartridge filters at 10 psi;

(d) Pressure diatomaceous earth filters at 10 psi; and

(e) Vacuum diatomaceous earth filters at 15 inches of mercury;

(4) Maintain disinfection residuals according to Regulation .48 of this chapter;

(5) Maintain water chemistry according to Regulation .49 of this chapter;

(6) Add, while the aquatic venue is closed, a non-stabilized oxidizer into the aquatic venue water equivalent to an amount of free chlorine equal to at least 10 times the measured combined chlorine residual plus sufficient free chlorine to oxidize the ammonia and nitrogenous compounds in the water, on a schedule of once per week for a pool and once per day for a wading pool, spa or spray ground; and

(7) Document the:

(a) Date;

(b) Time;

(c) Combined chlorine residual, in ppm, before adding the oxidizer;

(d) The amount of non-stabilized oxidizer added to the aquatic venue; and

(e) The combined chlorine residual, in ppm, after adding the oxidizer.

E. An Aquatic Venue Qualified Operator Level 2 may not, under the scope of this certification, hire an individual holding an Aquatic Venue Qualified Operator Certification Card Level 1.

F. An Aquatic Venue Qualified Operator Level 3 may under the scope of this certification:

(1) Hire an individual holding an Aquatic Venue Qualified Operator Certification Card Level 1;

(2) Perform all duties related to the operation of an aquatic venue as required by this chapter;

(3) Teach an Aquatic Venue Qualified Operator training course that has been approved by the Department.

.48 [Sanitary Quality of Water.

Although routine testing is not required, an owner shall ensure that the water in a public pool or spa:

A. Has a coliform bacteria level of less than 1 coliform per milliliter; and

B. Is free of pathogenic organisms.**1**

Disinfection of an Aquatic Venue.

A. For a Category A aquatic venue, an owner shall ensure that a qualified operator uses and maintains disinfectants and cyanuric acid levels according to the Model Aquatic Health Code.

B. For a Category B aquatic venue, an owner shall ensure that a qualified operator maintains:

(1) A primary disinfectant, added to the water automatically through an approved chemical feeder, to produce a residual level as specified below:

(a) Except as provided by §B(1)(b) of this regulation, free chlorine between:

(i) 1.5 ppm and 10 ppm in pools for swimming and diving and water recreational attractions;

(ii) 3 ppm and 10 ppm in pools for wading or therapy or for a public spray ground; and

(iii) 4 ppm and 10 ppm in spas;

(b) For an aquatic venue where ORP is at or above 680 and monitored by an approved automatic controller, free chlorine between:

(i) 1 ppm and 10 ppm in pools for swimming and diving and water recreational attractions;

(ii) 2.5 ppm and 10 ppm in pools for wading or therapy or for a public spray ground; and

(iii) 3.5 ppm and 10 ppm in spas;

(c) The maximum amount of combined chlorine at or below **1** ppm for all aquatic venues;

(d) Except as provided in §B(1)(e) of this regulation, total bromine between:

(i) 3 ppm and 8 ppm in pools for swimming and diving and water recreational attractions; and

(ii) 4 ppm and 8 ppm in spas, pools for wading or therapy, and public spray grounds; and

(e) For an aquatic venue where ORP is at or above 680 and monitored by an approved automatic controller, total bromine between:

(i) 2 ppm and 8 ppm in pools for swimming and diving and water recreational attractions; and

(ii) 3 and 8 ppm in spas, pools for wading or therapy, and public spray grounds;

(2) For an aquatic venue using supplemental disinfectant in conjunction with a primary disinfectant that:

(a) For an aquatic venue using copper and silver ions:

(i) Copper ions between 0.2 ppm and 1 ppm;

(ii) Silver ions at or below 0.05 ppm;

(iii) In pools for swimming and diving and water recreational attractions, chlorine in combination with copper and silver ions between 0.5 ppm and 10 ppm;

(iv) In spas, pools for wading or therapy, and public spray grounds, chlorine in combination with copper and silver ions between 1.5 ppm and 10 ppm;

(v) In pools for swimming and diving and water recreational attractions, total bromine in combination with copper and silver ions between 1 ppm and 10 ppm; and

(vi) In spas, pools for wading or therapy, and public spray grounds, total bromine in combination with copper and silver ions between 3 ppm and 10 ppm;

(b) For aquatic venues using an ozone generator, ozone, measured 2 inches below the water surface, at or below 0.1 ppm;

(c) For an aquatic venue using PHMB, PHMB at or above 30 ppm; and

(d) For an aquatic venue using an ultraviolet light/hydrogen peroxide system, hydrogen peroxide at or above 20 ppm; and

(3) For an aquatic venue using cyanuric acid or a similar chlorine stabilizer, the cyanuric acid or similar chlorine stabilizer at or below 50 ppm.

C. For a Category B aquatic venue, an owner or qualified operator may not use:

(1) PHMB in an aquatic venue that uses jets or sprays;

(2) PHMB in conjunction with:

(a) Any halogen compound; or

(b) Ozone;

(3) Cyanuric acid in conjunction with:

(a) A bromine compound; or

(b) An indoor aquatic venue; or

(4) An ultraviolet light/hydrogen peroxide system in conjunction with a diatomaceous earth filter.

.49 [Chemical Handling and Storage.

An owner shall ensure that a:

A. Material safety data sheet for a potentially hazardous chemical is available to the operator;

B. Chemical is handled, used, stored, and disposed of in accordance with the material safety data sheet and all applicable federal, State, and local codes; and

C. Chemical is stored in a chemical storage area which is in compliance with Regulation .29 of this chapter.**1**

Water Chemistry of an Aquatic Venue.

A. An owner of a Category A aquatic venue shall ensure that a qualified operator maintains the water chemistry of an aquatic venue according to the Model Aquatic Health Code.

B. An owner of a Category B aquatic venue shall ensure that a qualified operator maintains the water chemistry of an aquatic venue according to the following requirements:

(1) The pH of the water is maintained between 7.2 and 7.8;

(2) The total alkalinity of the water is maintained between 60 ppm and 180 ppm;

(3) Except for spas, calcium hardness of the water is maintained between 150 ppm and 1,000 ppm;

(4) For spas, calcium hardness of the water is maintained between 100 ppm and 800 ppm;

(5) The Langelier Saturation Index of the water is maintained between -0.3 and +0.5 as calculated by:

(a) The Langelier Saturation Index formula: $Langelier\ Saturation\ Index = pH + TF + CF + AF - TDSF$; and

(b) The following factor table:

<u>Temperature</u> <u>(°F)</u>	<u>Temperature</u> <u>Factor</u>	<u>Calcium</u> <u>Hardness</u> <u>(ppm)</u>	<u>Calcium</u> <u>Factor</u>	<u>Total</u> <u>Alkalinity</u> <u>(ppm)</u>	<u>Alkalinity</u> <u>Factor</u>	<u>Total</u> <u>Dissolved</u> <u>Solids</u> <u>(ppm)</u>	<u>Total</u> <u>Dissolved</u> <u>Solids</u> <u>Factor</u>
-----------------------------------	-------------------------------------	---	---------------------------------	---	------------------------------------	---	--

<u>32</u>	<u>0.0</u>	<u>5</u>	<u>0.3</u>	<u>5</u>	<u>0.7</u>	<u><1000</u>	<u>12.10</u>
<u>37</u>	<u>0.1</u>	<u>25</u>	<u>1.0</u>	<u>25</u>	<u>1.4</u>	<u>1000-1999</u>	<u>12.19</u>
<u>46</u>	<u>0.2</u>	<u>50</u>	<u>1.3</u>	<u>50</u>	<u>1.7</u>	<u>2000-2999</u>	<u>12.29</u>
<u>53</u>	<u>0.3</u>	<u>75</u>	<u>1.5</u>	<u>75</u>	<u>1.9</u>	<u>3000-3999</u>	<u>12.35</u>
<u>60</u>	<u>0.4</u>	<u>100</u>	<u>1.6</u>	<u>100</u>	<u>2.0</u>	<u>4000-4999</u>	<u>12.41</u>
<u>66</u>	<u>0.5</u>	<u>150</u>	<u>1.8</u>	<u>150</u>	<u>2.2</u>	<u>5000-5999</u>	<u>12.44</u>
<u>76</u>	<u>0.6</u>	<u>200</u>	<u>1.9</u>	<u>200</u>	<u>2.3</u>	<u>—</u>	<u>—</u>
<u>84</u>	<u>0.7</u>	<u>300</u>	<u>2.1</u>	<u>300</u>	<u>2.5</u>	<u>—</u>	<u>—</u>
<u>94</u>	<u>0.8</u>	<u>400</u>	<u>2.2</u>	<u>400</u>	<u>2.6</u>	<u>—</u>	<u>—</u>
<u>105</u>	<u>0.9</u>	<u>800</u>	<u>2.5</u>	<u>800</u>	<u>2.9</u>	<u>—</u>	<u>—</u>
<u>128</u>	<u>1.0</u>	<u>1000</u>	<u>2.6</u>	<u>1000</u>	<u>3.0</u>	<u>—</u>	<u>—</u>

(6) Except for an aquatic venue utilizing an electrolytic chlorine generator, the amount of total dissolved solids is maintained so that it does not exceed 1,500 ppm;

(7) For an aquatic venue utilizing an electrolytic chlorine generator, the amount of total dissolved solids is maintained so that it does not exceed 1,500 ppm above the starting value of the total dissolved solids as documented on the aquatic venue's data sheet for the aquatic venue when balanced; and

(8) The starting value of the total dissolved solids for the aquatic venue is updated whenever the aquatic venue is drained and filled;

(9) The amount of dissolved metals is maintained so that it does not exceed the following levels:

(a) Iron, 0.3 ppm;

(b) Manganese, 0.3 ppm; and

(c) Copper, 1.3 ppm; and

(10) The water clarity is maintained so that either a 6 inch seechi disc placed in the deepest part of an aquatic venue or the main drain is clearly visible and sharply defined when observed from the side of an aquatic venue.

C. An owner shall ensure that a qualified operator:

(1) Uses water additives and treatment chemicals according to the manufacturers' instructions; and

(2) Does not allow anyone in the water when chemicals are added directly to an aquatic venue,;

(a) During dispersion; or

(b) Until the chemicals are dissolved and diffused throughout an aquatic venue.

D. An owner of a Category A aquatic venue shall ensure that a qualified operator maintains the water temperature for a mechanically heated aquatic venue according to the Model Aquatic Health Code.

E. An owner of a Category B aquatic venue shall ensure that a qualified operator maintains the water temperature for a mechanically heated aquatic venue at or below:

(1) 88°F for a pool or spray ground;

(2) 104°F for a spa; and

(3) 96°F for a therapy pool or for a pool meeting the turnover rate for a therapy pool as required by Regulation .29B and the disinfection of a therapy pool as required by Regulation .48 of this chapter.

.50 [Control of Infectious and Contagious Diseases.

A. An owner may not knowingly permit an individual to enter the water of a public pool or spa who has:

(1) An infectious or contagious disease that may be transmitted through water;

(2) An open cut, blister, or other lesion; or

(3) Diarrhea.

B. An owner or operator may not prohibit an individual from entering the water of a public pool or spa if a physician certifies that the individual's condition is not infectious or contagious by waterborne transmission.**1**

Operating Records Required.

A. An owner of a Category A aquatic venue shall ensure that a qualified operator maintains operating records according to the Model Aquatic Health Code.

B. An owner of a Category B aquatic venue shall ensure that a qualified operator maintains operating records on a form provided by the Secretary or an equivalent form and shall:

(1) Except as provided in §B(2) of this regulation, record the information required by:

(a) §C(1)–(3) of this regulation in:

(i) 2 hour intervals for a recreational pool, public spa, or public spray ground beginning before opening; or

(ii) Intervals no less than 2 hours and no more than 4 hours apart for a limited public-use pool, or semipublic pool beginning before opening; and

(b) §C(4)–(10) of this regulation in intervals no less than 2 hours and no more than 4 hours apart for an aquatic venue beginning before opening;

(2) For an aquatic venue where an approved automatic controller is used, record the information required by §C of this regulation:

(a) In intervals no less than 2 hours and no more than 4 hours apart; and

(b) More frequently if required by the Secretary due to conditions such as high bather load, high temperatures, bright sunlight, or inadequate water quality;

(3) Record the following information in the intervals required by §§A and B of this regulation:

(a) Disinfectant residual in ppm;

(b) Combined chlorine level in ppm, if chlorine is used;

(c) pH;

(d) Water clarity;

(e) Water temperature in degrees Fahrenheit, if heated;

(f) Flow rate in gpm;

(g) Filter influent pressure and effluent pressure in PSI;

(h) Pump vacuum in PSI;

(i) Total number of bathers; and

(j) If the aquatic venue is equipped with an automatic controller, ORP and pH readings from the automatic controller;

(4) Record in 1 week intervals for a public pool and in 1 day intervals for a public spa or spray ground:

(a) Total alkalinity level in ppm;

(b) Calcium hardness level in ppm; and

(c) Cyanuric acid level in ppm, if used;

(5) Record daily for an aquatic venue:

(a) The time of filter backwash or cleaning;

(b) An injury or accident at an aquatic venue;

(c) Chemicals added to the water;

(d) For a spa:

(i) The water replacement interval;

(ii) The interval between the last water change; and

(iii) The difference between the water replacement interval and the interval between the last water change; and

(e) (text unchanged)

(6) Date and sign each record sheet and initial each entry;

(7) Each day before opening the aquatic venue record the results of the following inspections to complete an Aquatic Venue Hazards Checklist:

(a) Suction outlet covers are:

- (i) Secure; and
- (ii) Free from breaks, cracks, or defects;
- (iii) Skimmers are free from any blockage;
- (iv) Skimmers are equipped with secure lids; and
- (v) Skimmers are equipped with functioning weirs;
- (b) Inlet and return covers are:
 - (i) In place;
 - (ii) Secure; and
 - (iii) Unbroken;
- (c) Warning signs are in place;
- (d) The on/off switch to each pump is clearly labeled;
- (e) If an aquatic venue is equipped with a suction vacuum release system, that the suction vacuum release system releases suction when tested;
- (f) The circulation pump is running;
- (g) The flow rate for the aquatic venue is between the minimum and maximum turnover rate; and
- (h) The certified qualified operator has verified compliance and signed or initialed the checklist.
- (8) Keep the records on file for a minimum of 3 years; and
- (9) Submit the records to the Secretary upon request.

.51 [Injury and Illness Reports.

A public pool or spa owner shall ensure that:

A. An injury, drowning, near drowning, or suction entrapment occurring at a pool or spa that results in death or that requires resuscitation or admission to a hospital is reported to the Secretary within 24 hours of the incident;

B. A waterborne illness contracted at a pool or spa is reported to the Secretary within 24 hours of the owner's or operator's knowledge of the incident;

C. A water rescue by aquatic safety personnel is reported to the Secretary every 3 months during operation or at the seasonal closure of the facility, whichever is more frequent; and

D. The information required in A-----C of this regulation is recorded on a pool and spa injury and illness report form provided by the Secretary.¹

Test Kits.

A. In order to comply with the requirements of Regulation .50 of this chapter, an owner shall ensure that a qualified operator uses:

(1) One or more of the following for measuring the disinfectant level:

(a) A chlorine or bromine test kit that is:

(i) The DPD reagent system for measuring free and combined chlorine or total bromine with an indicator range from 0 to 10 ppm; or

(ii) The DPD reagent system for measuring free and combined chlorine or total bromine with procedures for performing a dilution test to achieve readings up to 10 ppm;

(b) An ozone test kit that is the indigo trisulfonate method for measuring ozone with an indicator range from 0 to 1 ppm;

(c) A copper test kit that is accurate to within +/- 0.1 ppm for measuring copper;

(d) A PHMB test kit with an indicator range from 0 ppm to 75 ppm; or

(e) A hydrogen peroxide test kit that is the DPD reagent system with an indicator range from 0 to 40 ppm;

(2) A phenol red test to measure pH with an indicator range from at least 7.0 to 8.0;

(3) An alkalinity titration test to measure alkalinity as milligrams per liter calcium carbonate;

(4) An EDTA hardness test to measure calcium hardness as milligrams per liter calcium carbonate; and

(5) A cyanuric acid test kit with an indicator range from 0 to 100 ppm, if cyanuric acid is used in the aquatic venue.

B. In order to comply with the requirements of Regulation .50 of this chapter, an owner may monitor:

(1) Chlorine and bromine residuals by measuring the ORP of the water before the disinfectant injection point; and

(2) The pH with a pH meter.

C. If an ORP or pH meter is used, an owner shall ensure that a qualified operator:

(1) Performs or has performed periodic calibration on these instruments to assure accurate measurements;

(2) Maintains documentation of calibrations for 3 years;

(3) Makes documentation of calibrations available to the Department upon request; and

(4) Performs manual measurements on a daily basis.

.52 [Disinfection of Swimsuits and Towels.

An owner shall ensure that a swimsuit or towel furnished to an individual by the owner or operator of a public pool or spa is:

A. Washed in a washing machine with laundry detergent in hot water with a temperature of at least 175(F; and

B. Rinsed in an effective disinfectant or heat dried at 175(F or more for at least 30 minutes after being washed. **1**

Sanitary Quality of Water.

A. Although routine testing is not required, an owner of an aquatic venue shall ensure that a qualified operator maintains the water in an aquatic venue so that it:

(1) Has a coliform bacteria level of less than 1 coliform per milliliter; and

(2) Is free of pathogenic organisms.

B. The Secretary may perform bacteriological testing of the water in an aquatic venue at any time the aquatic venue is in operation.

C. If the Secretary determines that the water in an aquatic venue does not meet the requirements in §A(1)—(2) of this regulation the qualified operator:

(1) Shall immediately close the aquatic venue and perform the requirements in Regulation .53A of this chapter; and

(2) May not operate the aquatic venue until compliance with §A(1)—(2) of this regulation is achieved.

.53 [Variances.

A. An owner who has been granted a variance by the Secretary before February 10, 1997 may continue to operate under that variance.

B. An owner may request a variance from a requirement of this chapter by submitting a written application that:

(1) Contains specific details of the alternative procedure proposed by the owner;

(2) Specifies the applicable regulation to which the variance pertains;

(3) Explains the reason for the request;

(4) Provides the name and address of the owner;

(5) Provides the name and location of the facility; and

(6) Demonstrates that the alternative procedure proposed:

(a) Meets or produces the intended effect of the regulation for which the variance is requested, and

(b) Maintains the protection of the health and safety of the individuals using the facility at or above the level required by the regulation for which the variance is requested.

C. Upon consideration of an application for a variance, the Secretary may grant the request for a variance if the:

(1) Applicant has submitted an application in accordance with the provisions of §B of this regulation;

(2) Applicant has complied with all other applicable provisions of this chapter;

(3) Application is justified due to physical limitation of the existing layout of the facility; and

(4) Secretary determines that the alternative procedure proposed by the applicant:

(a) Meets or produces the intended effect of the regulation, and

(b) Maintains the protection of the health and safety of the individuals using the facility at or above the level required by the regulation at issue.

D. The Secretary shall grant or deny an application for a variance in writing and shall mail the decision to the applicant within 60 days of the date the application for a variance is received by the Department.

E. If the determination of the Secretary is to deny a variance request that has been made in compliance with the provisions of §B of this regulation, the applicant may file an appeal of the denial in accordance with State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland, and shall contact the Secretary within 10 days of receipt of the denial to preserve a right to a hearing.¹

Fecal, Vomit, and Blood Incident Response at an Aquatic Venue

A. An owner of a Category A aquatic venue shall ensure that a qualified operator handles fecal, vomit and blood incidents according to the Model Aquatic Health Code.

B. An owner of a Category B aquatic venues shall ensure that a qualified operator at aquatic venue where:

(1) A fecal or vomit incident has occurred:

(a) Immediately closes the aquatic venue, and has patrons exit the venue;

(b) Removes as much of the fecal material or vomit as possible and disposes of it in a sanitary manner;

(c) Cleans and disinfects the items used to remove the fecal material or vomit;

(d) Ensures pH is maintained at 7.5 or less;

(e) Ensures that:

(i) The temperature is maintained at 77°F or higher; or

(ii) If the temperature is less than 77°F the contact time required in §A(7) or (8) is doubled;

(f) Ensures that if cyanuric acid or some other similar stabilizer is utilized at the aquatic venue the contact time required in §A(7) or (8) is doubled;

(g) For a formed-stool fecal or vomit incident, maintains the free chlorine level at:

(i) 1 ppm for 45 minutes;

(ii) 2 ppm for 23 minutes;

(iii) 3 ppm for 15 minutes;

(iv) 4 ppm for 11 minutes;

(v) 5 ppm for 9 minutes;

(vi) 6 ppm for 8 minutes;

(vii) 7 to 8 ppm for 6 minutes; or

(viii) 9 to 10 ppm for 5 minutes;

(h) For a diarrheal fecal incident, maintains the free chlorine level at:

(i) 10 ppm for 25.5 hours;

(ii) 15 ppm for 17 hours;

(iii) 20 ppm for 13 hours;

(iv) 25 ppm for 10.5 hours;

(v) 30 ppm for 8.5 hours;

- (vi) 35 ppm for 7.5 hours;
- (vii) 40 ppm for 6.5 hours;
- (viii) 45 ppm for 6 hours;
- (ix) 50 ppm for 5.5 hours; or
- (x) 55 ppm for 5 hours; and
- (i) Records the incident in the Fecal, Vomit, and Blood Incident Response log as required by Regulation .57 of this chapter; and
- (2) A blood incident has occurred:
 - (a) Immediately cleans and disinfects the area around the aquatic venue contaminated by blood, utilizing the blood borne pathogen control kit required by Regulation .44 of this chapter;
 - (b) Measures the disinfectant level in the aquatic venue water to ensure it is compliant with Regulation .48 of this chapter; and
 - (c) Records the incident in the Fecal, Vomit, and Blood Incident Response log as required by Regulation .57 of this chapter.

.54 [Compliance Schedules.

A. The owner of a public pool or spa that has a structure, equipment, or appurtenance that is not in compliance with this chapter as determined by the Secretary may submit to the Secretary for approval a compliance schedule for meeting the requirements of this chapter.

B. The request from an owner for approval of a compliance schedule shall include:

- (1) The reason that the noncompliance item cannot be immediately corrected;
- (2) The plan for correction of the noncompliance item; and
- (3) The time schedule for the correction of the noncompliance item.

C. The Secretary may approve the compliance schedule if the:

- (1) Owner has submitted a written request for approval of a compliance schedule in accordance with §B of this regulation;
- (2) Time schedule for the correction of the noncompliance item is accepted by the Secretary; and
- (3) Operation of the pool or spa during the time allowed to bring the pool or spa into compliance does not adversely affect the health and safety of the public.

D. The Secretary may not approve a compliance schedule for a newly constructed pool or spa that has not received construction approval under Regulation .08 of this chapter.

E. The Secretary shall issue an operating permit or shall refrain from suspending an operating permit to an owner if:

- (1) A compliance schedule has been approved by the Secretary for the correction of a noncompliance item;
- (2) The owner is following the approved compliance schedule; and
- (3) The pool or spa is otherwise in compliance with this chapter.¹

Water Replacement.

A. An owner of a Category A aquatic venue shall ensure that a qualified operator replaces the entire volume of water within the aquatic venue according to the requirements of the Model Aquatic Health Code.

B. An owner of a Category B aquatic venue shall ensure that a qualified operator of a public spa replaces the entire volume of water within the public spa when the difference between the interval since the last water change and the WRI, as calculated according to §C of this regulation, is less than or equal to zero.

C. Water Replacement Interval.

WRI (days rounded to the nearest whole number) = (1/3) X (spa volume in gallons) / (number of bathers since last water change).

D. Water loss due to evaporation may not be counted as water drained and replaced to meet the requirements of §B or C of this regulation.

.55 Chemical Handling and Storage.

A. An owner of a Category A aquatic venue shall ensure that chemical handling and storage is according to the Model Aquatic Health Code.

B. An owner of a Category B aquatic venue shall ensure that a:

(1) Safety data sheet for each chemical used at an aquatic venue is:

(a) Available to the qualified operator;

(b) Maintained within:

(i) A water proof cover; and

(ii) A 3 ring binder; and

(c) Is current;

(2) Chemical is handled, used, stored, and disposed of in accordance with the safety data sheet and all applicable federal, State, and local codes;

(3) Chemical is stored in a chemical storage area which complies with Regulation .33 of this chapter; and

(4) Qualified operator is provided with the:

(a) Personal protective equipment listed in the safety data sheet for each chemical used at the aquatic venue; and

(b) Training necessary to properly use the personal protective equipment listed in the safety data sheet for each chemical used at the aquatic venue; and

C. An owner of a Category B aquatic venue shall ensure that the personal protective equipment required by §B(4)(a) of this regulation is maintained at the aquatic venue.

.56 Control of Infectious and Contagious Diseases.

A. An owner of a Category A aquatic venue shall ensure that infectious and contagious diseases are controlled according to the Model Aquatic Health Code.

B. An owner of a Category B aquatic venue may not knowingly permit an individual to enter the water of an aquatic venue who has:

(1) An infectious or contagious disease that may be transmitted through water;

(2) An open cut, blister, or other lesion; or

(3) Diarrhea.

C. An owner or qualified operator may not prohibit an individual from entering the water of an aquatic venue if a physician certifies that the individual's condition is not infectious or contagious by waterborne transmission.

.57 Aquatic Venue Incident Reports.

A. An owner of an aquatic venue shall ensure that a qualified operator is reporting:

(1) An incident occurring at an aquatic venue to the Secretary within 24 hours of the incident on an Aquatic Venue Incident Report Form, which complies with §B of this regulation, when the incident:

(a) Results in:

(i) Death; or

(ii) Transportation of patron to a medical facility; or

(b) Requires resuscitation, including CPR, oxygen, or AED;

(2) An illness contracted at an aquatic venue to the Secretary within 24 hours of the owner's or qualified operator's knowledge of the incident on the Aquatic Venue Incident Report Form, which complies with §B of this regulation; and

(3) Water rescues by aquatic safety personnel to the Secretary every 3 months during operation or at the seasonal closure of an aquatic venue, whichever is more frequent, on the Aquatic Venue Incident Report Form, which complies with §B of this regulation.

B. The Aquatic Venue Incident Report Form shall include:

(1) The name of aquatic venue;

- (2) The physical address of the aquatic venue;
- (3) The name of the owner of the aquatic venue;
- (4) The mailing address of the owner of the aquatic venue;
- (5) The phone number of the owner of the aquatic venue;
- (6) The name of the aquatic venue management company, if applicable;
- (7) The license classification of the aquatic venue;
- (8) The type of aquatic venue;
- (9) The type of use;
- (10) The date and time of the incident;
- (11) The type of incident;
- (12) Who the victim was treated by on-site;
- (13) Whether cardiopulmonary resuscitation was required;
- (14) Who performed the resuscitation, if applicable;
- (15) Whether an automated external defibrillator was used;
- (16) Whether the victim was admitted to the hospital;
- (17) The name of the hospital, if applicable;
- (18) Whether the incident resulted in death;
- (19) The date and time of death, if applicable;
- (20) The emergency response units and associated report numbers;
- (21) Whether a certified aquatic venue qualified operator was present during the incident;
- (22) Whether a lifeguard was present during the incident;
- (23) The number of lifeguards present, if lifeguards were on duty;

(24) An attached aquatic venue:

(a) Diagram showing the locations of the victim;

(b) Diagram showing the location of each lifeguard, if applicable;

(c) Supervision plan;

(d) List of house rules;

(e) Emergency plan;

(f) Lifeguard certification; and

(g) Certified aquatic venue qualified operator card;

(25) The State or local agencies notified;

(26) The date and time the State or local agency was notified;

(27) The name of the person that was notified, if notification occurred by telephone;

(28) The signature of the owner or qualified operator completing the form;

(29) The printed name of the owner or qualified operator completing the form;

(30) The phone number of the owner or qualified operator completing the form;

(31) The email address of the owner or qualified operator completing the form; and

(32) The fax number of the owner or qualified operator completing the form; and

E. All fecal, vomit or blood incidents that occur at an aquatic venue are recorded in the Fecal, Vomit, Blood Incident Response log which shall include:

(1) Date of the incident;

(2) The time of the incident;

(3) Levels for the following before treating the water at the aquatic venue:

(a) Free chlorine residual in ppm;

(b) pH; and

(c) Temperature in degrees Fahrenheit;

(4) Levels for the following at the halfway point for treating the water at the aquatic venue:

(a) Free chlorine residual in ppm;

(b) pH; and

(c) Temperature in degrees Fahrenheit;

(5) Levels for the following at the end of treating the water at the aquatic venue:

(a) Free chlorine residual in ppm;

(b) pH; and

(c) Temperature in degrees Fahrenheit;

(6) Date bacteriological samples were taken; and

(7) The four locations where the bacteriological samples were taken from within the aquatic venue.

.58 Electrical Systems and Bonding.

A. An owner of a Category A aquatic venue shall ensure that:

(1) Electrical systems and bonding at the aquatic venue comply with the Model Aquatic Health Code; and

(2) All metal and electrical equipment is tested according to the frequency specified in the Model Aquatic Health Code by a licensed electrician; and

(3) A licensed electrician:

(a) Signs a bonding certification affidavit; and

(b) Submits the bonding certification affidavit to the Department before the previous bonding certification affidavit expires.

B. An owner of a Category B aquatic venue shall ensure that once every 2 years a licensed electrician:

(1) Tests all metal and electrical equipment connected with the aquatic venue;

(2) Signs a bonding certification affidavit; and

(3) Submits the bonding certification affidavit to the Department before the previous bonding certification affidavit expiring.

C. A bonding certification affidavit:

(1) For a Category A aquatic venue shall be valid for 6 months from the date signed by the licensed electrician; and

(2) For a Category B aquatic venue shall be valid for 2 years from the date signed by the licensed electrician.

D. For a Category B aquatic venue an owner shall not operator or allow bathers to use the aquatic venue when:

(1) Bonding conductors are disconnected; or

(2) Grounding conductors or grounding electrodes that are associated with recirculation or disinfection equipment or with underwater lighting systems are damaged.

.59 Standardization and Audits of Local Health Departments.

A. The Department shall:

(1) Standardize one local standardization officer related to the enforcement of this chapter for each local health department;

(2) Audit local health department aquatic venue programs related to the enforcement of this chapter once every four years according to the current audit protocols; and

(3) Provide to the local health department an aquatic venue program review final report.

B. Local health departments shall submit to the Department responses to any deficiencies within the aquatic venue program as identified within the aquatic venue program review final report within 30 business days of receipt of the report.

.60 Emergency Eyewash Stations.

An owner of an aquatic venue shall ensure that an emergency eyewash station meeting the requirements of ANSI Z358.1-2014, Eyewash Standard is provided in all chemical storage spaces in which chemicals will be stored.

.61 Standards for Float Tanks.

An owner of a:

A. Category A float tank shall ensure that the float tank complies with:

(1) COMAR 10.17.03;

(2) All applicable State and local codes; and

(3) The Model Aquatic Health Code.

B. Category B float tank shall ensure that the float tank complies with:

(1) COMAR 10.17.03; and

(2) All applicable State and local codes.

.62 Compliance Schedules.

A. The owner of an aquatic venue that has a structure, equipment, or appurtenance that is not in compliance with this chapter as determined by the Secretary may submit to the Secretary for approval a compliance schedule for meeting the requirements of this chapter.

B. The request from an owner for approval of a compliance schedule shall include:

(1) The reason that the noncompliant item cannot be immediately corrected;

(2) The plan for correction of the noncompliant item; and

(3) The time schedule for the correction of the noncompliant item.

C. The Secretary may approve the compliance schedule if the:

(1) Owner has submitted a written request for approval of a compliance schedule in accordance with §B of this regulation;

(2) Time schedule for the correction of the noncompliant item is accepted by the Secretary; and

(3) Operation of an aquatic venue during the time allowed to bring the aquatic venue into compliance does not adversely affect the health and safety of the public.

D. The Secretary may not approve a compliance schedule for a newly constructed aquatic venue that has not received construction approval under Regulation .09 of this chapter.

E. The Secretary shall issue an operating permit or shall refrain from suspending an operating permit to an owner if:

(1) A compliance schedule has been approved by the Secretary for the correction of a noncompliant item;

(2) The owner is following the approved compliance schedule; and

(3) An aquatic venue is otherwise in compliance with this chapter.

F. A local health department that issues or denies a compliance schedule under the authority of the Secretary shall mail a copy of the compliance schedule application and response to the Department within 60 business days of the date the application for a compliance schedule is received by the local health department.

.63 Variances.

A. An owner may request a variance from a requirement of this chapter by submitting a written application that:

(1) Contains specific details of the alternative procedure proposed by the owner;

(2) Specifies the applicable regulation to which the variance pertains;

(3) Explains the reason for the request;

(4) Provides the name and address of the owner;

(5) Provides the name and location of the facility; and

(6) Demonstrates that the alternative procedure proposed:

(a) Meets or produces the intended effect of the regulation for which the variance is requested; and

(b) Maintains the protection of the health and safety of the individuals using the facility at or above the level required by the regulation for which the variance is requested.

C. Upon consideration of an application for a variance, the Secretary may grant the request for a variance if the:

(1) Applicant has submitted an application in accordance with the provisions of §B of this regulation;

(2) Applicant has complied with all other applicable provisions of this chapter;

(3) Application is justified due to physical limitation of the existing layout of the facility; and

(4) Secretary determines that the alternative procedure proposed by the applicant:

(a) Meets or produces the intended effect of the regulation; and

(b) Maintains the protection of the health and safety of the individuals using the facility at or above the level required by the regulation at issue.

D. The Secretary shall grant or deny an application for a variance in writing and shall mail the decision to the applicant within 60 business days of the date the application for a variance is received by the Department.

E. If the determination of the Secretary is to deny a variance request that has been made in compliance with the provisions of §B of this regulation, the applicant may file an appeal of the denial in accordance with State Government Article, Title 10, Subtitle 2, Annotated Code of Maryland, and shall contact the Secretary within 10 calendar days of receipt of the denial to preserve a right to a hearing.

F. A local health department that issues or denies a variance request under the authority of the Secretary shall mail a copy of the variance application

and response to the Department within 60 business days of the date the application for a variance is received by the local health department.

Administrative History

Effective date: February 10, 1997 (24:3 Md. R. 187)

Chapter revised as an emergency provision effective July 1, 1999 (26:16 Md. R. 1238); amended permanently effective December 13, 1999 (26:25 Md. R. 1898)

Regulation .01A amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .02 amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .03 amended as an emergency provision effective January 3, 2014 (41:2 Md. R. 88); amended permanently effective May 12, 2014 (41:9 Md. R. 521)

Regulation .03A amended effective March 20, 2000 (27:5 Md. R. 584); December 19, 2005 (32:25 Md. R. 1942)

Regulation .04 amended as an emergency provision effective December 19, 2008 (36:4 Md. R. 345); amended permanently effective June 15, 2009 (36:12 Md. R. 837)

Regulation .04A, B amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .05B amended effective March 20, 2000 (27:5 Md. R. 584); December 19, 2005 (32:25 Md. R. 1942)

Regulation .05B amended as an emergency provision effective December 19, 2008 (36:4 Md. R. 345); amended permanently effective June 15, 2009 (36:12 Md. R. 837)

Regulation .05B amended as an emergency provision effective January 3, 2014 (41:2 Md. R. 88); amended permanently effective May 12, 2014 (41:9 Md. R. 521)

Regulation .06 amended as an emergency provision effective January 3, 2014 (41:2 Md. R. 88); amended permanently effective May 12, 2014 (41:9 Md. R. 521)

Regulation .08 amended as an emergency provision effective January 3, 2014 (41:2 Md. R. 88); amended permanently effective May 12, 2014 (41:9 Md. R. 521)

Regulation .09C amended effective March 20, 2000 (27:5 Md. R. 584)

Regulation .09E repealed effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .12B amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .13C amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .14A amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .15A amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .16C, D amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .17C, D amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .18A amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .21B amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .22A amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .25B amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .25C amended effective March 20, 2000 (27:5 Md. R. 584)

Regulation .26 amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .27 amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .27F amended as an emergency provision effective January 3, 2014 (41:2 Md. R. 88); amended permanently effective May 12, 2014 (41:9 Md. R. 521)

Regulation .28 amended effective March 20, 2000 (27:5 Md. R. 584); December 19, 2005 (32:25 Md. R. 1942)

Regulation .28 amended as an emergency provision effective December 19, 2008 (36:4 Md. R. 345); amended permanently effective June 15, 2009 (36:12 Md. R. 837)

Regulation .28F, G amended as an emergency provision effective January 3, 2014 (41:2 Md. R. 88); amended permanently effective May 12, 2014 (41:9 Md. R. 521)

Regulation .35A amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .40 amended effective March 20, 2000 (27:5 Md. R. 584);
December 19, 2005 (32:25 Md. R. 1942)

Regulation .41B amended effective December 19, 2005 (32:25 Md. R. 1942)

Regulation .43 amended effective March 20, 2000 (27:5 Md. R. 584)

Regulation .46 amended effective March 20, 2000 (27:5 Md. R. 584)

Regulation .53A amended as an emergency provision effective January 3, 2014 (41:2 Md. R. 88); amended permanently effective May 12, 2014 (41:9 Md. R. 521)